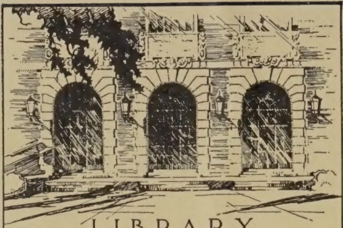

THIS volume is one of a series bound for complimentary private distribution, and contains a portion of the text lectures used in the Pace & Pace Professional Courses in Accountancy and Business Administration.

THEORY AND PRACTICE OF ACCOUNTS
APPLIED ECONOMICS AND ORGANIZATION

By HOMER ST. CLAIR PACE, C. P. A. (N. Y.)

LECTURE I

THE FOUNDATION

PACE & PACE

PACE STANDARDIZED COURSES IN ACCOUNTANCY, BUSINESS ADMINISTRATION, AND ENGLISH, IN RESIDENCE AND BY EXTENSION

30 CHURCH STREET, NEW YORK CITY

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LECTURE I

THE FOUNDATION

Wealth

Articles that cost an effort to produce and that satisfy the needs or desires of mankind are known as **wealth.**

For example, wild fruit that is gathered and made available for food costs an effort and satisfies a need, and is an article of wealth.

The locomotive, a machine that aids in the transportation of things and persons, is a more complicated instance. Its manufacture involves the gathering of natural products, the mental effort of the inventor, the physical labor of the workman and mechanic, and the work of the trader in making the various exchanges.

Air, on the other hand, while supplying the most urgent of necessities, is common to all without effort. It has, therefore, under usual conditions no economic value, and is not wealth.

The articles that constitute wealth vary in their character from those that satisfy the primary needs of food, clothing and shelter to those that satisfy the desire for adornment or other luxury, without regard to actual needs.

The Right of Property

The ownership of the articles of wealth, it is believed, was first held in common by the members of the family or tribe. Community ownership early gave way to individual ownership. With the latter there came into existence the **right of property,** which is the right of one individual to the possession, use and enjoyment of something, in nearly all cases an article of wealth, to the total exclusion of every other person.

Inasmuch as the use of certain articles of wealth is essential to existence, and the possession of others conduces to comfort and pleasure, the determination of the respective property rights of individuals is a matter of interest and consequence.

Units of Measurement

The exercise of exclusive rights over property presupposes an interest in the extent of the ownership. The savage who claimed the ownership of his weapons undoubtedly preferred as many as he could conveniently use to a less number, insufficient for his needs.

One of the chief incentives for an enumeration, or count, is thus found, and it is supplied by the method of numbering—one, two, three, etc.—that is used to some extent by all races, civilized or uncivilized. In this way, an idea of the number or extent of things is expressed.

Many articles in their nature lend themselves conveniently to measurement in mere numbers. Thus, it may be said that there are forty cars in the train, and that there are ten trains a day for six days of the week.

Numbers are divided into convenient groupings, as for example, gross or score, and by custom the terms are applied to certain things, as a dozen of eggs or a gross of pens. Another common grouping is into ten, or multiples thereof.

Other things are measured more conveniently by a special unit. Thus, wheat is measured by the bushel, fluids by the gallon, coal by the ton and cloth by the yard. Numbers are relied upon, however, to convey an idea of the extent of the units, and thus it is said that ten tons of coal will supply fuel for a house, or that forty bushels of wheat are contained in the load.

It is obviously inconvenient to state an aggregate ownership of the articles of wealth in the various units of measurement, for it would be necessary to state it in bushels, yards, gallons, etc. It was done in this way at one time, however, and there are records in existence that show that taxes in ancient governments were levied and paid in terms of quantity measurement, such as measures of grain.

For the aggregate measurement a common denominator is required, in which all property rights may be stated. Such a unit has been in use for thousands of years, and is known as **money.** It is a medium by which wealth, and the effort expended to produce wealth, may be measured.

Money is itself divided into convenient units, known variously as dollars, pounds, francs, etc., and they are expressed in numbers, which are essential to all enumerations or counts.

Each article of wealth has a worth, known as **value,** that may be expressed in the required number of units of money. Thus, four bushels of wheat may be valued at one dollar a bushel, or four dollars, while a cord of wood may be valued at three dollars. The owner of both possesses values to the extent of seven dollars. It is obvious that the articles have been reduced to a common basis, comparable with all other articles of value.

Money serves another purpose in that it is a token of effort expended, exchangeable for the products of other effort. By its use, the producer may sell his product, taking an agreed value in money, which can be held in convenient form until he finds a seller of those things which he desires. A new exchange is then made, the seller taking his pay in money, which he in turn can convert into goods, and so on.

Prerequisites

The foregoing, that is to say, wealth, the right of property and a unit of measurement, are necessary prerequisites to the development and use of a scientific method of stating the extent of property rights, and determining their increase and decrease.

Wealth supplies the subject matter, or articles, the value of which is to be stated.

The right of property, by which one individual has exclusive rights in the things that are essential to his existence and that satisfy his tastes, is accompanied by a desire for a knowledge of the extent of the ownership, and its fluctuations.

The unit of measurement, money, as applied to the value or worth of property rights, provides a common measure that is essential to the comprehension of the extent of ownership.

Definitions and Distinctions

Accounting is the science of recording and stating facts in relation to the acquisition, production, conservation and transfer of property rights or values.

Accounting has a **theory,** or body of underlying principles, upon which is based a **practice,** involving the construction and use of all records, statements and devices needed to record and state values and their transfer.

Auditing is the verification of the accounting record that, presumably, is made in accordance with the theory and practice of accounting.

Law, so far as accounting is concerned, supplies all necessary rules and regulations in relation to the acquisition and disposition of property values, and all transactions incident thereto.

Accountancy is a profession, the practice of which involves a general academic education and a special or technical training in Accounting, Auditing and Law.

The members of the profession of Accountancy, known as **accountants,** offer their services to the public in the construction, installation and operation of accounting systems, the presentation of accounting facts, the verification of accounting records, and in such other matters as their special training may justify.

The object of these lectures is to present the theory and practice of Accounting, as above defined, in its fundamental aspects. The lectures provide the basic technical training for the practice of Accountancy and for private employment upon accounting records.

Accounting Objects

The science of accounting has two principal and well defined objects, namely:

1. The determination, at any desired time, of the financial position of an individual or enterprise, that is, the possession of values and the liability for values.

2. The determination, for any period of elapsed time, of the increase or decrease of values of an individual or enterprise.

Accounting Essentials

Three essentials must be met in an accounting record in order that the objects of accounting may be fully secured, namely:

1. **Original Position.** The financial position of the individual or enterprise, that is, the possession of values and the liability for values, at the beginning of the accounting period, must be determined and recorded.

This meets, for that moment of time, the first object of accounting, and provides a statement against which comparisons may be made with subsequent financial statements.

2. **Chronological Record.** A record of the financial transactions subsequent to the time of starting, in the order of dates, must be made.

This provides a record of the acquisition and transfer of values that affect the original position, and supplies material for achieving the second object of accounting.

3. **Rest.** There must be a rest, or time at which the accounting record momentarily ceases, for the determination of the financial position.

This provides a statement that may be compared with the statement showing the original position, and, if the second essential is properly

met, the two positions may be reconciled by a tracing of the transactions affecting values.

The time, usually a year, that elapses between the two financial positions and during which the chronological record is made, is known as the **accounting period.**

The **calendar** year, that is, the period from January 1st to December 31st, inclusive, is the ordinary accounting period.

A **fiscal** year may be any consecutive twelve-months' period, such as the twelve-months' period from July 1st to June 30th, inclusive, that constitutes the business year adopted by railroads.

The accounting period is usually the same as the fiscal year, irrespective of whether the latter is for the calendar year or some other twelve-months' business period.

Bookkeeping

The systematic and chronological recording of facts as to the ownership and transfer of values is known as **bookkeeping,** and is the medium through which accounting results are obtained.

The term **accounting** is more comprehensive than the term **bookkeeping,** as there are several systematic records for recording financial facts, any of which may be called bookkeeping. The term accounting embraces all methods of bookkeeping. The two methods in common use are known as **Double Entry** and **Single Entry.**

The system of Double Entry bookkeeping, so far as can be traced. appeared in Venice and Genoa in the fourteenth century, and was known as the Method of Venice. More than a century later, in 1494, a monk, Luca Paciola, published the first treatise upon Double Entry bookkeeping. The first English work upon the subject, by Hugh Oldcastle, a schoolmaster, was published in London in 1543. Several fairly complete works appeared in England and America early in the nineteenth century.

The system that Paciola set forth is now the recognized standard of bookkeeping. It remains unchanged in principle, and it has been changed in practice only to save labor and to meet the different conditions under which business is now transacted.

The term Single Entry has a restricted meaning, as will be explained in a subsequent lecture, although under Single Entry bookkeeping may be grouped all the methods and devices, other than Double Entry bookkeeping, by which the attempt is made to record values and the transfer of values.

Single Entry has gradually given way to Double Entry until now it is rarely used except in small retail undertakings.

Double Entry Theory

The system of Double Entry has become the standard of bookkeeping because, by its use, the objects of accounting are accomplished with the least effort.

Double Entry bookkeeping is based upon the theory of a natural law of compensation or balance. In nature there are many instances of a division of things into two parts, effecting a balance or equilibrium. For example, there are two poles, north and south, there is an east and a west, day and night, male and female, etc.

This natural law of balance or equilibrium supplies the fundamental principle of Double Entry bookkeeping. Considering the first object of accounting, that is, the statement of the ownership of values, it will be seen that the theory of balance, or equilibrium, can be applied, for the total of such net values must equal the worth of the owner. Thus, in the case of an individual possessing values to the extent of ten thousand dollars, the values and the worth of the owner constitute a balance or equilibrium, as follows:

Values........	\$10,000	Worth of Owner...	\$10,000

The application of the principal to transactions subsequent to the statement of the initial ownership will be considered later.

Double Entry Definitions

In accounting, things of value owned, and the right to receive values, are known as **assets.** They may be classified for the purpose of accounting as follows:

1. **Real property,** that is, land and all buildings and fixtures that are permanently attached to the land;

2. **Personal property,** including all things of value other than real property, such as merchandise, money, and the right to receive values, such as accounts receivable, or amounts due from others known as **debtors.**

The debts due to others, known as **creditors,** in accounting are termed **liabilities.** Liabilities present an element the inverse, or opposite, of assets.

The net worth of an individual is the amount of his assets, less the amount of his liabilities, and is known in accounting as **capital.** It is the amount by which the assets exceed the liabilities.

In the economic sense, an individual's capital is the total, or gross amount of assets he possesses. Thus, if the total assets in a business

amount to $25,000, the economic capital is $25,000, although there may be $10,000 of liabilities. In such a case, however, the accounting capital would be only $15,000.

Throughout all accounting, unless otherwise specified, the term capital is used in the latter sense, and means the excess of asset values over liabilities.

The assets of a **trader,** or merchant, to illustrate the definitions given, are $20,000 and his liabilities are $10,000. The accounting capital, therefore, $10,000, is the amount of the excess of assets over liabilities.

It is obvious that assets = liabilities + capital. The condition may be displayed in a form similar to the one previously given, as follows:

Assets...........	$20,000	Liabilities........	$10,000
		Capital (to balance).......	10,000
	$20,000		$20,000

The initial balance, or equilibrium, necessary to open double entry books of account when the assets exceed the liabilities, can always be established in this manner. No matter into how many items the assets and liabilities may be divided, the excess of the total amount of the assets over the total amount of the liabilities is the capital, and the amount necessary to establish a balance.

Original Position

In opening double entry books of account it is necessary to determine the first essential of accounting, or original position.

The assets and liabilities are inventoried and displayed in opposition, in the manner before indicated. Assets are carried to the left side of the statement, and this position to the left, or **debit,** side is maintained for assets throughout all double entry. The liabilities are carried to the right, or **credit,** side, and always thereafter appear on the credit side.

The capital, while not a liability in the sense that it is an amount due a creditor, is an amount showing the accountability of the business to the owner, subject to the payment of the liabilities. It must appear with a credit balance to effect a balance or equilibrium.

The initial statement is variously known as a **Statement of Assets and Liabilities, Statement of Affairs,** and **Balance Sheet.** The two latter terms are perhaps best reserved for other statements, to be described later. In the construction of such a statement, let it be assumed that John Doe started in business January 2, 1902, with $5,000 in cash and

$9,000 in merchandise values, with no liabilities. The condition would be displayed as follows:

JOHN DOE.

STATEMENT OF ASSETS AND LIABILITIES AS AT JANUARY 2, 1902.

ASSETS.		CAPITAL.	
Cash..................	$5,000	John Doe, Capital......	$14,000
Merchandise...........	9,000		
	$14,000		$14,000

As an illustration of a more complicated case, Richard Roe started in business July 1, 1902, with $1,000 in cash, $2,500 in accounts receivable, real estate valued at $15,000, upon which there was a bond and mortgage (liability) for $8,000. There was six months' interest at six per cent. due on the mortgage.

The procedure is to list the assets and liabilities and carry in Capital to balance, thus:

RICHARD ROE.

STATEMENT OF ASSETS AND LIABILITIES AS AT JULY 1, 1902.

ASSETS.		LIABILITIES.	
Cash..................	$1,000	Bond & Mortgage	$8,000
Accounts Receivable (as per Schedule)........	2,500	Accrued Interest........	240
Real Estate............	15,000		
Total Assets.......	$18,500	Total Liabilities....	$8,240
		Capital................	10,260
	$18,500		$18,500

The principle is the same in all cases. The object is to find the net capital or investment by listing all assets and all liabilities as they stand on the day the statement is dated.

Interest that is accrued, but not due, is as much a liability as the bond itself, for the bond may not be due to be paid for several years. Therefore, accrued interest and all similar items, whether assets or liabilities, must be taken into the statement.

In the rare case of an excess of liabilities over assets, the amount necessary to effect a balance must be carried to the left side, as a **deficit** or **deficiency.** It constitutes an element the inverse of capital, or an accountability for values beyond those owned.

The Journal

The position of the individual or undertaking having been thus ascertained and a statement constructed on the double entry principle of making the total debit items equal the total credit items, the actual opening of the books of account, by the transfer of facts, is in order.

In double entry bookkeeping, the **Journal,** in one form or another, is the book in which the original record of the business is kept from day to day, including the statement of the original assets, liabilities and capital.

The most common form of Journal is a bound book, ruled, beginning at the left, with columns for date, a wide column for names of accounts, a narrow column for ledger page or folio (abbreviated L. F.) to which posting is made, and two money columns, one for debits and one for credits. The ordinary ruling is, therefore, substantially as follows:

(Month)	(Day)	(Names of Accounts)	L. F.	(Debit Money Column)	(Credit Money Column)

In transferring the facts from the Statement of Assets and Liabilities the same relative positions are maintained in the money columns, the assets being carried to the left, or debit, column, and the liabilities and capital to the right, or credit, column.

Upon the basis of the first Statement of Assets and Liabilities of John Doe, and following the rule stated, the opening Journal entry would be as follows:

NEW YORK, January, 1902.

		2		
		CASH..............................	$5,000	
		MERCHANDISE..................	9,000	
		To JOHN DOE, Capital...........		$14,000
		For assets (no liabilities) of John Doe, who this day engages in the business of.............................		

It is obvious that it is a reproduction of the Statement of Assets and Liabilities, except that the money columns are adjoining.

The above entry means that Cash is debtor for $5,000, that is, Cash is debited with it. The meaning of this is clearer when one thinks of the cash as turned over to the cashier or placed in a drawer, in which case the cashier or the drawer is accountable, or debtor, for the amount and should be charged with it.

The entry also means that Merchandise is likewise chargeable with $9,000 of value and must account therefor.

The entry means further that John Doe is to be credited with $14,000, for, considering the business as a thing apart from himself, he should receive credit for the capital he contributes. The credit indicates the accountability of the business to the proprietor.

The old way of expressing the entry would be **Cash, Dr., Merchandise, Dr., To John Doe, Cr.** The **Dr.** and **Cr.** abbreviations are now dispensed with, but the **To** remains in use, so that the usual form is as given above.

The best method is to place the name of the city or town in which the business is located, with the month and year, at the head of the Journal page, and the day of the month in the center immediately above the entry, as shown in the foregoing illustration. This obviates the necessity of using the column to the left of the page for date, which can be utilized for some other purpose.

Considering the more complicated condition shown in the second example, the opening entry would be as follows:

NEW YORK, July, 1902.

		1			
		CASH............................		$1,000	
		ACCOUNTS RECEIVABLE........		2,500	
		REAL ESTATE..................		15,000	
		To BOND & MORTGAGE.......			$8,000
		" ACCRUED INTEREST......			240
		" RICHARD ROE, CAPITAL..			10,260
		For assets, liabilities and capital of Richard Roe, who this day engages in the business of................			

In the foregoing, Cash, Accounts Receivable and Real Estate are accountable for the respective amounts with which they are debited. An account would be opened with each debtor, but here, in the absence of details, Accounts Receivable are treated as one account.

The liabilities, Bond & Mortgage, and Accrued Interest, are credited with the respective amounts to show the liability of the business on account of each. The Capital Account is treated as in the foregoing illustration.

The form will become impressed with subsequent work. It is here important to understand that assets are carried to the debit column, and liabilities and capital to the credit column.

In Journal illustrations hereafter given, no rulings will be shown, but merely the accounts affected, which will be sufficient to show the principles of debit and credit.

In each entry the total placed in the debit column must equal the total placed in the credit column, to preserve the equilibrium of the work.

The Ledger

Not only the opening entries, but also every subsequent transaction, might be recorded in the Journal, and a complete record of the business kept in this way, as will be seen as the system is unfolded.

It is easily seen, however, that it would be necessary to classify or index the record in such a way that all entries bearing upon a particular

subject, as, for instance, Cash, could be ascertained, viewed and considered as a whole. Thus, if the amounts for which Cash is accountable, are recorded by debits, a summation of such debits is necessary to disclose the total accountability. Without such an arrangement of items, the Journal record would give little or no idea of the facts of the business.

This classification of facts is made by carrying or **posting** the Journal entries to **accounts,** in a book called the **Ledger,** each account having a debit and credit side. Journal debits are posted to the debit of Ledger accounts, and Journal credits are posted to the credit of Ledger accounts.

A Ledger account is a collection, under a distinctive caption, in a book called a Ledger, of the debits and credits pertaining to a particular person or subject.

The Ledger ruling resembles the Journal ruling in that there are debit and credit money columns, although the arrangement, in the ordinary Ledger ruling, is different, and more nearly resembles the form shown for the Statement of Assets and Liabilities.

Starting from the extreme left of the page, the ruling is, columns for month and day of month, column for explanations, column for Journal folio, that is, page of Journal from which amount is carried, and money column for debit items. This consumes the left half of the page, and the right half is ruled in a similar manner, the money column being for credit items, thus:

(Month)	(Day)	(Explanations)	F.	(Debit Money Column)	(Month)	(Day)	(Explanations)	F.	(Credit Money Column)

The Ledger is the book in which the principal facts recorded in the Journal are collected in accounts, each account with the caption, and the debits and credits appertaining to that account, as determined and shown in the original record in the Journal.

The total debit of each Journal entry being the same as the total credit, it follows that if the entries are correctly posted to the Ledger

accounts, the total debits of the Ledger accounts will always equal the total credits.

By ascertaining whether the debits and credits of the Ledger accounts are in balance, a valuable check is provided upon the accuracy of the postings.

In the first example of Journal entries given, three accounts would have to be opened in the Ledger, and after posting, they would appear as follows:

CASH.

1902 Jan.	2	To John Doe, Capital.....	1	$5,000					

MERCHANDISE.

1902 Jan.	2	To John Doe, Capital.....	1	$9,000					

JOHN DOE, CAPITAL.

					1902 Jan.	2	By Sundries..	1	$14,000

The explanation in the Cash Account **To John Doe, Capital,** means that Cash was debtor **To John Doe, Capital,** credit. It names the account that received the credit, so that, by glancing down the debit column of the Cash Account, the accounts that received the various credits can be determined, without reference to the Journal. The same explanation applies to the Merchandise Account.

The **By Sundries** in John Doe, Capital Account, means that more than one item (Cash and Merchandise) was debtor to that amount. In case one account only were debited, it would be named, but if more than one account is debited, it is customary to use the term **Sundries.**

The date and folio column in the illustrative Ledger accounts are self-explanatory.

The Basic Books

The Journal and Ledger are the two essential books in double entry bookkeeping. By their use, every necessary record and classification can be made.

A complete record may, in fact, be maintained in either alone, but on account of lack of classification, as explained, the Journal without the Ledger is inadequate.

On the other hand, debits and credits may be made directly to Ledger accounts in the first instance, without passing through a Journal. Such a procedure, however, does not afford a record that may be considered in chronological order; it burdens the Ledger accounts with a mass of detail not needed in the classification of transactions, and, in general, opens the way to omissions and errors.

Practically, both Journal and Ledger are necessary for successful work in double entry bookkeeping.

As all other books are but forms of the Journal and Ledger, a thorough mastery of the principles of these books will materially simplify the further consideration of the double entry bookkeeping fabric, which rests upon the few principles and three essentials that have been outlined.

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LECTURE II

THE RECORD OF TRANSACTIONS

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LECTURE II

THE RECORD OF TRANSACTIONS

General View

The object of the commercial undertaking, under ordinary circumstances, is to make a profit. In a trading concern the effort to secure such profit takes the form of buying at one price and selling at a higher price, the difference in the buying and selling prices, or **Gross Profit,** as it is usually termed, being large enough, presumably, to cover all the expenses of the undertaking and to leave a balance, which is known as **Net Profit.**

In the illustrative Statements of Assets and Liabilities that have been considered, the Capital Account measures the net asset value, or net worth, of the undertaking.

Especially in the first example, in which there are no outside liabilities, but merely assets on the left side, balanced by the Capital Account on the opposite side, it is apparent that the Capital Account is but a measurement of the values that exist *contra*, or opposite.

This is always the function of the Capital Account—it indicates to the proprietor the amount of his net investment in the business, or, as some choose to express it, it shows the liability or accountability of the business to the proprietor.

If profits are earned by exchanging assets for assets of greater value, and the profit is not withdrawn from the business, there must be an increase in the capital or investment to the extent of such profit.

If expenses are incurred in making such turnover, they must be deducted from the Gross Profit in order to arrive at the net increase in the investment or capital.

Stating the proposition arithmetically, if the initial Capital was		$900.00
and the Gross Profit is	$200.00	
by deducting the expenses incurred in securing such Gross Profit	75.00	
we arrive at the Net Profit		125.00
which, if left in the business, would increase the Capital to		$1,025.00

Stating the same proposition from the Double Entry accounting viewpoint, by raising a Capital Account, it is as follows:

CAPITAL ACCOUNT.

To Expenses	$75.00	By Balance	$900.00
" *Balance down*	1,025.00	" Gross Profit	200.00
	$1,100.00		$1,100.00
		By Balance	$1,025.00

It thus appears that, if losses and expenses are charged to Capital Account, and profits are credited to Capital Account, and there are no withdrawals by the proprietor, the balance of the Capital Account will be larger or smaller just as the business makes a net profit or loss.

Instead of making such charges and credits directly to the Capital Account, it is customary to raise intermediate, or temporary, accounts, that hold the items of expense and profit in suspense until the close of the interval of time, usually one year, which is known as the **accounting period.**

Scrutinizing more closely the items of expense and loss, it is found that they are either paid by turning over an asset as where rent is paid by cash, or they are taken into the accounts by setting up a liability, as where rent is due to another and is credited to an account opened in his name.

It follows that such expenses and losses must be debited, either to take the place of the asset which is surrendered and therefore credited, or to balance the liability which is credited, as will be more fully illustrated later.

Profits, on the other hand, consist of increased assets and are **measured** by credit balances.

Thus, if the business has $500 of merchandise, the Merchandise Account will be debited with that amount, and if it should be sold for cash for $600, Cash Account would be debited with the $600 received and Merchandise Account would be credited, leaving Merchandise Account with a **credit balance** of $100.

That is, a profit of $100 has been earned, which consists of cash, and it is measured by the credit balance of the Merchandise Account.

Assets and expenses (including losses) being debited, and liabilities, capital and profits being credited, it follows that an account with a debit balance is either an asset or an expense, or a combination of the two, and that an account with a credit balance is either a liability, capital or a profit or some combination of these elements.

By the method of raising intermediate accounts, instead of carrying items of profit and loss directly to Capital, all the items of a certain kind are brought together in an account. For example, all payments on account of salaries are charged to Salaries Account.

This classification of expenses and profits is of use in the conduct of the business during the accounting period through comparisons which can be made with similar classifications of former periods, and it is of value in the preparation of analytical statements at the close of the accounting period.

At the completion of the period the balances of the **Nominal** accounts, as they are termed, carrying profit and loss elements, are brought together, usually by Journal entries, in a ledger account called a **Profit & Loss Account.**

It is necessary to bring all losses and expenses to the Profit & Loss Account by charging the latter and crediting the particular expense account, thus:

PROFIT & LOSS........................
    To SALARIES......................

It is necessary to bring all profits to the Profit & Loss Account by crediting the latter and charging the particular profit account, thus:

INTEREST (received)....................
    To PROFIT & LOSS.................

The construction of a Profit & Loss Account is merely a gathering in one Ledger account of the items of profits and losses, offsetting them against each other.

If the total of the profit items exceeds the total of the loss items,

the excess, being a credit balance and measuring increased asset value in the business, is carried to Capital Account, thus:

PROFIT & LOSS........................
To CAPITAL........................

The foregoing entry balances the Profit & Loss Account, and clears the books, at that particular moment, of all Nominal accounts. If a loss is incurred, it is carried to Capital by a debit entry and Profit & Loss Account is credited to balance.

If drawings had been made by the proprietor during the accounting period, they would have been charged, properly, to a **Drawing Account** or **Personal Account** opened in his name, the balance of the Profit & Loss Account would first have been taken to such account, and the balance, measuring the net increase or decrease of investment in the business, would have been carried to the Capital Account.

Instead of raising a separate **Drawing Account** and charging it with withdrawals, they are sometimes charged directly to Capital Account. The method of keeping withdrawals in a distinct account, and carrying the amount of the net increase or decrease of capital to the Capital Account and thereby showing the net result without a multiplicity of items, is preferable.

This view of the Profit & Loss Account is now given in order to show its relation to the Nominal accounts, and that it is merely a consolidation of such elements and the gateway through which they find their way to the Capital Account.

It is important that the general plan be grasped by the student in order that the goal to be attained, and the general means of reaching it, may be clearly in mind before, as well as during, the consideration of the details which is about to be undertaken.

Therefore, to reiterate, the books are opened with the assets on the debit side, and the liabilities and Capital on the credit side, effecting an **equilibrium,** or balance.

During the transaction of the business for the period, Nominal, or temporary, accounts are raised, to which expenses are charged and to which profits are credited, and at the end of the period these accounts are closed into one, and the net profit or loss is offset against drawings in the Drawing Account, and the balance is carried to Capital Account, and marks the increase or decrease of net asset value in the business as the result of the transactions for the fiscal period.

After the Nominal accounts are closed out, the books, so far as the nature of the accounts is concerned, are in the same condition as when

opened—assets appearing as debits to accounts, and liabilities and Capital as credits to accounts.

Real, Personal and Nominal Accounts

The temporary accounts, raised in the course of the accounting period, to be offset and closed out, are known as **Nominal** accounts, and their nature has already been sufficiently noted.

As distinguished from Nominal accounts, those accounts representing real facts as to the ownership of values, such as Cash, Real Estate, Machinery, Plant, etc., and the liability for values, such as Accounts Payable, are known as **Real** accounts.

Accounts with persons, either with **debtors,** those indebted to the business, or with **creditors,** those to whom the business is indebted, are also known as **Personal** accounts.

Personal accounts are, in fact, Real accounts, although they are often given the distinctive classification.

Another classification of accounts is into **Personal** and **Impersonal,** the former being those with persons, and the latter all other accounts. This classification seems to be illogical, because the Impersonal accounts include those representing asset values, such as Real Estate, and those representing nominal elements, such as Rent, thus associating elements of entirely dissimilar character.

The most logical division would seem to be into Real accounts, subdivided into accounts with persons and accounts with things, and Nominal accounts.

Upon the opening of a set of books only Real accounts ordinarily appear, but upon the transaction of business Nominal accounts are raised, and remain until closed out at the end of the accounting period.

Purchases

The business of a trading concern provides transactions that illustrate the principles of accounting, and although a comprehensive theoretical view of the transactions of an accounting period has been given, it will now be reinforced by entries covering specific transactions.

The first procedure in a trading business, is to buy stock. It may be bought for cash, in which case Merchandise would be charged and Cash credited, the following Journal entry covering the principles of debit and credit:

MERCHANDISE..........................
    To CASH..............................

That is, the transaction is merely an exchange of an asset of one kind for an asset of another kind, and so it appears in the books as raising

an asset by a charge to Merchandise, and the cutting down of another asset by a credit of an equal amount to Cash.

If the purchase is made upon credit, Merchandise would be debited and the person or concern from whom the purchase is made would be credited, as follows:

MERCHANDISE........................
To WILLIAM JONES.................

That is, the transaction amounts to obtaining an asset by incurring a liability of an equal amount, and it is carried out in the books by charging the assets and crediting the person or concern to whom the business is indebted for the asset.

In either event, whether one asset be raised and another cut down by a like amount, or whether an asset be obtained and a liability of a like amount be incurred, the net condition of capital is not changed.

Sales

Sales, in the natural order of things, follow purchases. Like purchases, they may be for cash or on time. If for cash, Cash is charged and merchandise credited, with the amount of the sale, thus:

CASH....................................
To MERCHANDISE.................

for Cash should be charged, that is, it is accountable for all cash received, and Merchandise, having been charged with the cost of goods, should be credited with the amount received for goods which have been sold and which have passed out of stock.

If the sale is on credit, the person to whom the goods are sold should be charged in an account opened in his name, and a credit should be made to Merchandise the same as in the foregoing illustration, thus:

ROBERT GORDON......................
To MERCHANDISE.................

for the business now has an asset in the **account receivable.**

Returned Purchases and Returned Sales

Goods are sometimes returned to the one from whom they were bought and are then known as **Returned Purchases.** The one to whom the return is made should be charged, and Merchandise credited, thus:

WILLIAM JONES.........................
To MERCHANDISE.................

for, to the extent of the return, it is the extinction of a liability by the turning over of an asset.

In like manner, customers of the business may return goods, and such returns are known as **Returned Sales.** In such cases Merchandise is charged and the customer credited with the amount, thus:

MERCHANDISE..........................
　　To ROBERT GORDON...............

for, to the extent of the return, it reduces an asset and restores the Merchandise Account to its former position.

Division of Merchandise Account

In the accounts of traders, a **Merchandise Account** is usually maintained, to which purchases are charged, sales credited, returned purchases credited and returned sales charged, in the manner which has been set forth.

A better and more modern method is to divide the Merchandise Account into two ledger accounts, viz., **Purchases,** to which purchases are charged and returned purchases credited; and **Sales,** to which sales are credited and returned sales charged, the Purchases Account showing the net purchases, and the Sales Account the net sales.

Or, if the volume of business justifies it, a further division may be made by opening a **Returned Purchases Account** and a **Returned Sales Account.**

The Merchandise Account is a consolidation of these various elements, and while it theoretically gives the same result as the division into separate accounts, practically the amount of net sales and net purchases cannot be determined, from time to time, as readily; the comparison of purchases and sales with previous periods is difficult; the Merchandise Account in practice frequently becomes the resting place of many items which are not otherwise easily disposed of; and, in short, it falls short of giving the satisfaction that is obtained by making the division into distinct Purchases and Sales accounts.

Profit

If the selling price differs from the purchase price, the new element of profit or loss enters into the accounts, for in that case the selling is not exchanging one asset for another of equal value, but for one of a greater or less value. Ordinarily, of course, the exchange is for an asset of a greater value, and a profit is made.

If the accounts are opened with Purchases and Sales accounts, and all the goods on hand are sold, there will be on the books a Purchases Account, debited with the cost of the goods, and a Sales Account, credited

with the selling price of the goods. It is a simple case of cost, as shown in the Purchases Account, as against proceeds, as shown in the Sales Account. The excess of the proceeds over the cost is the Gross Profit made in the trading transactions.

If no expenses were incurred in these transactions, and no drawings made by the proprietor, the excess of the Sales Account over the Purchases Account would be the net increase of assets on account of the trading operations, to be finally taken into the Capital Account.

In practice there would be expense items to be charged against the Gross Profit, but this does not change the principle in the least.

Practically, it seldom happens that the goods are completely sold out, for the purchases and sales go on continually. But if the goods on hand are inventoried at cost prices, and the amount deducted from the cost of the goods as shown by the Purchases Account, it is evident that the balance will be the cost of the goods sold.

To express it tersely, cost of goods bought, less cost of goods on hand, equals cost of goods which have passed out of stock.

This being true, it is easy to arrive at cost against selling price, as was done in the theoretical case where the goods were all sold. The exact method of doing this will be considered in the next lecture.

Division of Expenses into Accounts

The Nominal accounts raised in the course of the business have to do principally with the items of expense, and just how many accounts shall be raised is a matter dependent upon the particular business and the requirements of its management.

In any event, the principal items of expense, such as wages, rent, insurance, freight, cartage, etc., are collected in distinct accounts.

When such expenses are paid in cash, the proper account is charged and Cash credited, and if not paid in cash, the proper account is charged and the party to whom the undertaking is liable for the amount receives the credit.

Thus, if it is a cash payment for rent, the entry is:

RENT......................................
    To CASH...............................

for an expense is incurred, which should be charged, and it is met by cutting down the asset of cash, which, therefore, should be reduced by the credit.

If it happens that the rent is due, and through shortage of cash, or otherwise, it is not paid in cash, the condition can be shown by charging

the expense account, Rent, as before, and crediting the person or concern to whom the rent is payable, thus:

RENT....................................
To DAVID BROWN.................

for an expense is incurred which has not been met, and for which a corresponding liability should be shown.

If, later, David Brown is paid in cash the amount due him, the entry would be:

DAVID BROWN..........................
To CASH.............................

for the liability, as shown in the account payable, is extinguished by the turning over of an asset.

The final net result of the David Brown rent transaction is a charge to Rent and a credit to Cash, as in the first illustration.

Discount

Discount is the abatement of a portion of a sum due or to become due.

Many classes of merchandise are sold on **credit,** that is, without cash payment, to persons with established financial standing, the time usually allowed being ten, thirty or sometimes sixty days. In such cases it is customary to allow a **discount,** or deduction, from the selling price in order to induce cash payments.

For example, if a bill of merchandise is bought for $1,000, terms net thirty days or one per cent. discount for cash, it can be settled by a cash payment of $990.

The term **discount** is also applied to the rate per cent. deducted from the face value of a negotiable instrument, and is in the nature of interest. It is a common practice for business concerns to issue their notes, generally for short periods of thirty, sixty or ninety days, without interest, and discount them at their banks, that is, sell them for what they will bring, the **proceeds** being the face of the note less the discount. Another method of securing cash is to endorse and discount bills or notes which have been received from customers, the discounting bank collecting the face value when due.

Discount deducted from such promissory notes, bills of exchange, etc., is computed by the method known as **Bank Discount,** that is, simple interest at the agreed rate of discount on the face of the bill for the time it has to run between the date of discount and maturity, counting the actual days.

Thus, the discount at 6 per cent. on a note for $1,000, maturing in thirty days, would be $5, and the proceeds or net cash to the one who discounts the note would be $995. If the note bears interest, the discount is computed on the total of principal and interest due on the note at maturity.

Bank Discount is the method in common use, and the courts have held that the term **discount** in an ordinary commercial document means a rebate of interest and not **true** or **mathematical** discount.

True Discount is "that interest on a certain principal for the term and at the rate which, when added to its principal, gives the face of the note or bill discounted." Thus, in the example given, the **true discount** would have been $4.9751, and the **Present Worth** the difference between $1,000 and $4.9751, or $995.0249. That is, the sum of $995.0249 and interest thereon at 6 per cent. for one month will amount to $1,000.

True Discount is found by dividing the amount of the obligation by the amount of $1 for a given time and rate (in the above case $1.005); the result will be the present Worth. The difference between the Present Worth and amount of the obligation is True Discount.

It will be seen that **Cash Discount** may be in favor of the business, as where a liability is settled before it is due, or it may be against the business, as where it is allowed to a customer for payment of an account before it is due; or it may be allowed to a bank for discounting a bill receivable or a bill payable.

Thus, discount may be an expense or a profit, and the Discount Account usually contains both elements, the balance of the account showing the net result of the total Discount transactions.

The same principles are involved in **Interest,** or the compensation for the use of money, when it is paid or received, and the items are frequently, although not necessarily, carried in one account under the caption **Interest & Discount Account.**

In determining the entry to be made for an item of Discount, the question is, Is it a profit or a loss? If it is a loss, it should be charged to Discount, because losses are charged and appear as debit balances of accounts; and the person in whose favor it is allowed should be credited. If it is a profit it should be credited to Discount, and the person from whom it is received should be charged. Items of interest received are similarly credited.

Trade Discount is a deduction from a **list price,** it being the custom in certain lines of business to keep a fixed list of prices, the fluctuations in the market prices being provided for by discounts from the list prices. Thus, if an article is listed at $8 a dozen, the price might be 10, 5 and 2

off, that is, 10 per cent. off $8, leaving $7.20, 5 per cent. off $7.20, leaving $6.84, and 2 per cent. off $6.84, leaving $6.70, as the actual price.

Prices sometimes depend upon the amount of business transacted with the particular customer, such differences in price being provided for by the discounts allowed from list prices.

Trade Discount is ordinarily not taken into the accounts, as it forms no part of the real price.

Allowances may be for prompt payment, adjustment of prices or overcharges, etc., and are deductions usually made to secure cash settlements. They are ordinarily treated in the same manner as Discounts.

Bills Receivable and Bills Payable

Promissory notes, bills of exchange and checks, are ordinarily termed **negotiable instruments.** Under the New York statute the essentials of a negotiable instrument are as follows:

1. It must be in writing, and signed by the maker or drawer;

2. Must contain an unconditional promise or order to pay a sum certain in money;

3. Must be payable on demand, or at a fixed or determinable future time;

4. Must be payable to order or to bearer; and

5. Where the instrument is addressed to a drawee, he must be named or otherwise indicated therein with reasonable certainty.

A **negotiable promissory note** is a written promise to pay to bearer or to order, for value received, a certain sum of money at a determinable future date. A **bill of exchange,** ordinarily called **bill,** is a written order of a person, called the **drawer,** upon a second person, called the **drawee,** to pay to bearer, or to the order of a third person called the **payee,** a certain sum of money at sight or at a determinable future date.

In Accounting, notes and bills, when they are due to the undertaking, are known as **bills receivable,** and when payable by the undertaking, are known as **bills payable.**

Checks, while they are negotiable instruments, are ordinarily treated as cash.

Settlement of liabilities is usually made by cash or by giving notes or bills. If settlement is made by cash, the creditor is debited and Cash credited. If settlement is made by bill, the creditor is debited and an account called Bills Payable is credited.

If the settlement is by cash, it is the extinction of a liability by turning over an asset of equal value, and hence, the liability is charged and

the asset credited. If a bill is given for the liability, it is but a change of the form of the liability from an open account to a formal written obligation to pay, and hence takes the form of extinguishing one liability by a charge and raising another liability account to take its place.

Bills Payable Account, being a liability, appears with a credit balance.

If a bill is issued with a view of obtaining cash, instead of the settlement of an open account, the ordinary method is to make a note for a certain amount, due at a future date, without interest. Such notes are usually discounted by a bank, the amount of cash received being debited, and the amount of discount, which is in the nature of interest paid in advance, is debited, and Bills Payable credited to balance, thus:

CASH..................................
DISCOUNT..............................
    To BILLS PAYABLE.................

When the bill is paid, Bills Payable Account is debited, and Cash is credited, for it is the extinction of a liability by turning over an asset.

If the bill is not paid, but renewed by a new bill, Bills Payable is debited, and Bills Payable is credited, so that the settlement of the prior note and the issue of the new one will appear in the Bills Payable Account. Discount is charged and Cash credited for amount of discount on new note.

In the same manner, customers of the undertaking may make a settlement of their accounts in cash or by bill, and the procedure is to debit cash or Bills Receivable, as the case may be, and credit the account of the customer. Even when the sale to a customer, and the receipt of the bill receivable from him, are simultaneous, it is the best practice first to debit his account with the amount of sale, crediting Merchandise, and then pass another entry charging Bills Receivable and crediting the customer. In this way the ledger account with the customer discloses all of the transactions with him.

Bills Receivable Account, being an asset, appears in the accounts with a debit balance.

The bills are held in the Bills Receivable account until paid, when Cash is debited and Bills Receivable credited; or, until the bills are discounted, that is, the right to collect the face of the bill at maturity sold to the bank for whatever price in cash such right will bring. In case the note is discounted, Cash is charged with the proceeds, and the amount of discount is charged to Discount Account, crediting Bills Receivable Account.

If a bill receivable is discounted and afterwards is dishonored, that is, not paid by the maker when due, it will come back to the business

for payment, inasmuch as it would under ordinary circumstances be endorsed. When such dishonored note is taken up Cash should be credited, if paid in cash, and the party from whom it was originally received is charged with the amount.

Dishonored bills should not be held in the Bills Receivable Account, but should be charged back to the party from whom they were received.

Distinctions Between Expenditures

An expenditure for rent represents nothing but loss at the end of an accounting period, if no payments have been made in advance. An expenditure upon office furniture would represent, at the end of the accounting period, value nearly equal to the expenditure.

The rent, being a necessary expense incurred in obtaining the gross profit for the period, should, in determining the net profit for the period, be closed out against such gross profit.

If the office furniture is worth less to the business, by reason of use or otherwise, than its cost, such **depreciation,** being a loss incurred in making the gross profit, is chargeable against it the same as a direct expense.

It is necessary that these distinctions be kept in mind in distributing charges between Real and Nominal accounts, as the soundness of the accounting conclusions as to profit and loss are dependent upon distinguishing and charging against gross profit all the losses incurred in making such profit.

THEORY AND PRACTICE OF ACCOUNTS

APPLIED ECONOMICS AND ORGANIZATION

BY HOMER ST. CLAIR PACE, C. P. A. (N. Y.)

LECTURE III

CLOSING THE BOOKS

PACE & PACE

PACE STANDARDIZED COURSES IN ACCOUNTANCY, BUSINESS ADMINISTRATION, AND ENGLISH, IN RESIDENCE AND BY EXTENSION

30 CHURCH STREET, NEW YORK CITY

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LECTURE III

CLOSING THE BOOKS

Rests

Among the fundamental requirements of an adequate accounting system as stated in Lecture I, there must be rests, or times at which the accounting record momentarily ceases. At such time of rest the financial position of the undertaking is ascertained and compared with former positions, and the intervening record is analyzed and studied with a view of increasing desirable and decreasing or eliminating undesirable results.

At the close of the accounting period, in order to attain the desired results, the process known as **closing the books** is carried out, although the expression, in its ordinary sense, does not mean a literal closing of all accounts in the books, but only a closing of the Nominal accounts that have been raised during the transactions of the period. It was formerly the practice actually to close out all accounts at the time of such rest, but this is no longer done, at least not by American and British accountants.

The process is a closing of the Nominal accounts into an account which is raised in the Ledger under the caption of **Profit & Loss,** and which is designed to show on the one hand, credit, the profits for the period, and on the other hand, debit, the expenses and losses for the period, the difference between the two, or balance, being the net profit or loss.

Trial Balance

The initial step in closing the books is to test the accuracy of the postings and obtain a comprehensive view of the Ledger accounts. This is accomplished by the preparation of a **Trial Balance.**

A **Trial Balance** is a schedule of the Ledger accounts, showing the debit or credit balance of each account, the balances being arranged in parallel debit and credit columns and effecting an equilibrium.

If the double entry principle is followed throughout in the entries and postings, and the balances of all the accounts are correctly abstracted and carried into the Trial Balance, the footings of the debit and credit columns will be the same, that is, they will balance.

Hence, the name, Trial Balance, meaning a trial of the accounts to ascertain if they are in balance.

A Ledger folio column is usually placed to the extreme left of the Trial Balance sheet to facilitate reference to the Ledger accounts.

The following is an illustrative Trial Balance of the accounts of a sole trader, taken at the close of an accounting period as a preliminary to closing the books:

JOHN SMITH

Trial Balance as at........

L. F.		Dr.	Cr
1	Real Estate	$10,000	
3	Furniture & Fixtures	1,100	
10	Cash	970	
12	Bond & Mortgage		$2,000
14	John Smith, Capital		14,590
100	John F. Jones	580	
105	Wm. Hall	2,410	
110	A. Brady	1,840	
200	A. Smith & Co		375
208	Ager Bros		900
212	W. A. Chandler		1,340
300	Merchandise		8,000
320	Rent	500	
321	Insurance	55	
324	Cartage	100	
326	Salaries	5,000	
330	Expense	4,900	
340	Interest		50
342	Discount		200
		$27,455	$27,455

Instead of the balances of the accounts, the totals of the debits and credits of each account are sometimes carried into the debit and credit columns respectively of the Trial Balance, and if the work is correct, the columns will balance as in the method of taking the differences, or balances. The first method is now the more usual, and has the advantage of showing, in each case, the net condition of the account, rather than the total of each side.

A Trial Balance is usually taken once a month in addition to the Trial Balance taken at the close of the period. By this means errors may

be discovered and corrected while fresh, and the corrective work distributed over the period instead of accumulating to be performed at the busy time of closing the books. In addition, the monthly Trial Balance affords a view of Ledger accounts which is useful in the management of the business.

The Trial Balance is valuable as a test of the accuracy of the work in posting Journal entries. If the balance cannot be effected, it is evidence of error, which must be corrected in order to bring the books to a balance.

Errors are, perhaps, most likely to occur in the preparation of the Trial Balance itself, through mistakes in addition and in abstracting the balances, or in omitting one or more Ledger accounts.

If there is no error in this work, the postings are open to suspicion as a likely place for errors to have occurred, and if it transpires that they are correct, it may be due to the Journal entries themselves not being in equilibrium.

While the attainment of a Trial Balance is not conclusive evidence that there are no errors, it is nevertheless strong evidence that the postings are correct, and that the balances have been properly abstracted.

One of the rare things that may occur is a compensating error, that is, an error on one side that exactly offsets an error on the other side. Such an error, as well as one by which an item is posted to the wrong account, without affecting the equilibrium of the books, will remain undetected so far as the balancing principle of the Trial Balance is concerned. However, the accuracy made possible by the Trial Balance check, characteristic as it is of Double Entry bookkeeping, quite compensates by its usefulness for the extra labor involved in making the entry with its twofold effect.

The other function of the Trial Balance is to afford a comprehensive view of the accounts as they exist in the Ledger, not only at the time of closing the books, but from time to time as the trial balances are taken during the business period.

At the time of closing the books, the Nominal accounts, brought to their proper amounts by adjustment entries after a careful survey of the business, are presented in the Trial Balance for scrutiny, and from it the information is obtained to formulate the Journal entries necessary to close the Nominal accounts into the Profit & Loss Account.

Trial Balance Book

In order to preserve the Trial Balances a Trial Balance Book is ordinarily kept, ruled with numerous debit and credit columns so that the

balances may be inserted without rewriting the names of the accounts for each trial balance. The ruling is as follows:

L. F.	Names of Accounts	Jan.		Feb.		Mar.		Apr.	
		Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.

The book is opened flat and the ruling extends over the two pages, affording columns for at least six months, and if an insert sheet is used between the pages, narrow enough not to obscure the names of accounts, columns for the entire year can be provided. The names of new accounts opened, ordinarily Personal accounts, can be added at the bottom of the list.

Closing the Nominal Accounts

As a preliminary step, an **inventory** or schedule of the goods on hand is made. It is merely a detailed list of the merchandise on hand, with values carried out, ordinarily, at cost prices.

If a Merchandise Account has been maintained it will, presumably, stand charged with the amount of the purchases, and credited with the amount of the sales. If we deduct from the amount of purchases the cost of the goods on hand, the difference will be the cost of goods that have passed out of stock.

Stating the proposition arithmetically with illustrative figures from the accounts of John Smith, the purchases amount to, say..	$60,000
The inventory of goods on hand, at cost, amounts to..........	6,000
Leaving cost of goods that have passed out of stock..........	$54,000
If the sales amount to, say..................................	68,000
The excess of selling over cost price, or Gross Profit, is........	$14,000

In Double Entry bookkeeping, the deduction of the amount of inventory from the cost of merchandise purchased is accomplished by crediting the Merchandise Account with the amount of Inventory. By the same entry a New Merchandise Account, or Inventory Account, is opened and charged with the amount of inventory, being at the moment a pure Real account, stating an asset value. The entry would be as follows:

INVENTORY AS AT——........	$6,000	
To MERCHANDISE...........		$6,000

At this stage the Merchandise Account stands credited with the

amount of sales..	$68,000
and with the amount of inventory........................	6,000
making the total credit.................................	$74,000
and it stands charged with the amount of purchases..........	60,000

the difference between the debit and credit sides of the Account being.. $14,000
which is a credit balance, and the amount of Gross Profit that was ascertained by the former solution.

The balance of the Merchandise Account at this time is purely Nominal, measuring the Gross Profit. It should be transferred to Profit & Loss Account, closing the Merchandise Account, by a Journal entry, as follows:

MERCHANDISE..................	$14,000	
To PROFIT & LOSS...........		$14,000

After the foregoing entries, the Merchandise Account, stating the purchases and sales in summary form, will appear as follows:

MERCHANDISE ACCOUNT

To Purchases....................	$60,000	By Sales.........................	$68,000
" *Profit & Loss* (Gross Profit) ...	14,000	" Inventory....................	6,000
	$74,000		$74,000

The balance of the Inventory Account, or New Merchandise Account, representing cost of merchandise on hand at the beginning of the succeeding accounting period, should be charged against the Merchandise Account of such period.

The various expenses and losses standing to the debit of Nominal accounts will then be debited to Profit & Loss Account and the respective

accounts credited to balance, as has been explained in Lecture II. This can usually be done by one consolidated entry, thus:

PROFIT & LOSS To SUNDRIES..	$10,555	
RENT........................		$500
INSURANCE................		55
CARTAGE....................		100
SALARIES...................		5,000
EXPENSE....................		4,900

The profits, other than the principal trading profit which has already been considered, are then credited to Profit & Loss Account and the respective Nominal accounts debited to balance. thus:

SUNDRIES To PROFIT & LOSS..		$250
INTEREST...................	$50	
DISCOUNT..................	200	

It is assumed in the illustrative figures that Interest and Discount accounts show a profit, but this, of course, is not always the case.

After the foregoing entries have been made and posted, the Ledger Profit & Loss Account will appear as follows:

PROFIT & LOSS ACCOUNT

To Rent..........................	$500	By Merchandise (Gross Profit)....	$14,000
" Insurance........................	55	" Interest......................	50
" Cartage......................	100	" Discount.......................	200
" Salaries......................	5,000		
" Expense.....................	4,900		
" *Balance down* (Net Profit).....	3,695		
	$14,250		$14,250
		By Balance.....................	$3,695

It is a desirable thing, in posting to the Ledger Profit & Loss Account, to show the items of profit and loss, instead of the **To Sundries** and **By Sundries,** which in themselves mean but little. Thus, instead of posting in a lump sum the total amount of expenses and losses, the amount transferred from each account, such as Rent, Insurance, Salaries, etc., is shown, and an inspection of the Ledger account will disclose the facts without recourse to the Journal.

The closing of the books is sometimes effected by direct transfers of the balances of Nominal accounts to the Profit & Loss Account, without the use of Journal entries. Thus, Rent Account would receive a direct

credit for the amount chargeable against the accounting period, and a debit for that amount would be made in the Profit & Loss Account. The use of the Journal entries is the better practice.

Withdrawals

Drawings are ordinarily made by the proprietor from time to time, and should be charged to a **Drawing Account** or **Personal Account.** The drawings form no part of the profit and loss transactions, and therefore should not be taken into the Ledger Profit & Loss Account. The balance, net profit or loss, of the Profit & Loss Account, as was explained in Lecture II, should be carried to the Drawing Account. The balance of the Drawing Account will then represent the net increase or decrease of Capital for the period, taking into account all the profits or losses and drawings, and should be transferred to the Capital Account, increasing or decreasing that Account just as the net investment is increased or decreased.

In the illustrative case under consideration, there being no drawings by the proprietor, the Net Profit is carried directly to the Capital Account, by an entry as follows:

PROFIT & LOSS.................	$3,695	
To CAPITAL ACCOUNT......		$3,695

The books will then disclose, as at the time of opening, assets to the debit of accounts and liabilities and Capital to the credit of accounts.

Asset and Liability Elements in Nominal Accounts

Great care should be exercised in closing Nominal accounts, as it is evident that, in order to arrive at the true profit, only the expenses which belong to the accounting period should be charged and only the profits which belong to the accounting period should be credited.

The expense accounts appearing in the ante-closing Trial Balance may show more or less charged than rightfully belongs to the period, so that a careful scrutiny and adjustment are necessary.

If insurance, for instance, is paid during the period for a three-years' term, the entire amount will doubtless appear charged to the Insurance Account, although at the time of closing the books only that part which is paid for insurance for the current accounting period should be charged as an expense of that period. The balance, being insurance paid in advance, at this time should be treated as an asset of the business, and not as an expense.

The simplest way to treat such an account is to charge Profit & Loss Account with the amount chargeable for the period and credit the amount

to Insurance Account, bringing down the balance of the Insurance Account, as a debit which would remain in the accounts.

The opposite condition would exist in the case of rent which was accrued but not paid, and possibly not due. In such a case Profit & Loss Account should be charged with the full amount of rent chargeable against the profits of the period, and Rent Account credited. The latter would then show a credit balance, measuring the liability on account of rent. The account should then be ruled off and the balance brought down.

There are other methods of treating such accounts. One is to close the old account entirely and bring down the balance in a new account, as, for instance, Insurance, New Account, and allow it to remain as a balance. This is practically the same as the first method outlined.

Another plan is to open an account called **Suspense Account** and carry to it the debit and credit items, the balance being the net asset or liability. Upon entering the next accounting period the items are distributed to their proper accounts and the Suspense Account closed, by entries directly the inverse of those by which the account was created.

A **Suspense Account** is one raised to hold temporarily that which properly belongs to another account, so it will be seen that the use of a Suspense Account in this case conforms to the general use of such an account.

The method used is not so important, so long as the principle of charging to an accounting period all the expenses and crediting to it all the profits which properly belong to it, is rigidly followed.

It is not sufficient, in actual work, to rely upon the accounts that appear in the Ledger, but a critical survey of the business itself must be made to ascertain whether there are any outstanding assets, liabilities expenses, losses or profits which should be brought into the accounts to arrive at the real results. In the illustrative accounts of John Smith, it is assumed that the accounts as presented in the Trial Balance stand at their proper amounts.

The Use of Nominal Accounts

It should be recalled at this time that the same result, or effect upon Capital, would have been produced by charging every expense and drawing and crediting every profit, directly to Capital Account, and that the whole system of Nominal accounts is raised for the purpose of classifying expenses and profits so that the relation of each class to the ultimate result may be appreciated.

Post-Closing Trial Balance.

A new Trial Balance should be taken after the final result is carried to Capital Account, to test the accuracy of the closing entries and postings,

and to display Ledger facts in such a way that they will be available for the preparation of later statements.

It will appear from such post-closing Trial Balance that the Ledger accounts present practically the same elements as the original statement upon which the books were opened, viz., assets appearing as debits, liabilities appearing as credits, and Capital Account, with a credit balance, to balance.

Although the actual items of assets and liabilities may vary from the original figures and the Capital Account show a different balance, as will undoubtedly be the case, the elements will be the same.

In the accounts of John Smith, heretofore considered, the Post-Closing Trial Balance is as follows:

JOHN SMITH

Post-Closing Trial Balance as at........

L. F.		Dr.	Cr.
1	Real Estate	$10,000	
3	Furniture & Fixtures	1,100	
10	Cash	970	
12	Bond & Mortgage		$2,000
14	John Smith, Capital		18,285
100	John F. Jones	580	
105	Wm. Hall	2,410	
110	A. Brady	1,840	
200	A. Smith & Co		375
208	Ager Bros		900
212	W. A. Chandler		1,340
290	Inventory	6,000	
		$22,900	$22,900

Upon the figures of the post-closing Trial Balance is based what is probably the most important statement in accounting—the **Balance Sheet.**

Balance Sheet

The **Balance Sheet,** to define it in accordance with the generally accepted idea among accountants, is a statement of the assets, liabilities and capital of an undertaking as at a certain time, prepared from facts recorded in double entry books of account.

The Balance Sheet is the statement by which the financial condition of the business, that is, the amount and kind of its assets and liabilities, as recorded in the Ledger, is made comprehensible to the proprietor and others. It is, in short, the connecting link between the books, on the one hand, and the proprietor, and his bankers or others to whom he may desire to communicate the financial condition of his business, on the other hand.

The Balance Sheet, as the most important statement that can be prepared from double entry books of account, is worthy of the most careful consideration, but in this elementary Lecture it is impracticable to do more than call attention to its most important characteristics.

The terms **Financial Statement, Business Statement, Statement of Resources and Liabilities, Statement of Assets and Liabilities,** etc., are sometimes used instead of the term Balance Sheet. None is so short as Balance Sheet, and as the term is in good standing among English-speaking accountants the world over, and is used by railroads, banks and large business institutions, no deviation from the accepted practice should be made by the Accountancy student.

The term **Statement of Assets and Liabilities** is generally reserved by accountants for the statement of assets and liabilities prepared from single entry books, or from sources other than double entry books.

A Balance Sheet should be headed with the name or style of the undertaking, and with the date at which it is made.

In the accepted American and Continental-European form, the assets appear on the left side of the Balance Sheet, under the caption **Assets,** and the liabilities, including Capital, on the right side, under the caption **Liabilities.**

The Balance Sheet being but a rearrangement of the post-closing Trial Balance, and not an account, the abbreviations **Dr. and Cr.,** and the introductory words **To** and **By** should not be used thereon.

In a single proprietorship or partnership it is customary to state the assets and liabilities in the order of their probable quickness in realization and liquidation respectively. In corporation Balance Sheets this order is ordinarily reversed, the quickest assets and liabilities appearing at the bottom.

The English practice is to reverse the sides of the Balance Sheet, placing the liabilities on the left side and the assets on the right side. This practice has doubtless grown out of the Companies Act of 1862, which provided for this illogical form.

The reason for the English form is not clear. The theory advanced in support of it is that, the statement being an account rendered to the proprietors, headed by the name of the undertaking, the undertaking should be credited with its assets and charged with its liabilities. As a matter of fact the Balance Sheet is not an account, but merely a rearrangement of the post-closing Trial Balance.

The Balance Sheet of John Smith, prepared upon the basis of the Post-closing Trial Balance which has been given, is as follows.:

JOHN SMITH

Balance Sheet as at........

Assets		*Liabilities*	
Cash	$970	Bond & Mortgage	$2,000
Accounts Receivable, as per Schedule	4,830	Accounts Payable, as per Schedule	2,615
Inventory	6,000	John Smith, Capital	18,285
Furniture & Fixtures	1,100		
Real Estate	10,000		
	$22,900		$22,900

For the sake of simplicity, no provision has been made in the foregoing illustrations for losses that may be incurred in the realization of the accounts receivable, either through bad debts or discounts, nor for depreciation. Such provision could be made by charging Profit & Loss Account with the estimated amounts, and in each case setting up, with a credit balance, a reserve. Thus, a Reserve for Bad Debts could be created, to which uncollectable accounts could be charged. Instead of creating a reserve for depreciation it is sometimes written directly off the asset account by a credit entry, reducing by the amount of such entry the amount at which the asset is carried in the books.

In case reserves are created they should appear on the Balance Sheet as a deduction from the value of the particular asset for which they are created, and not as a balance on the liability side.

Trading Account

Instead of using a Merchandise Account throughout the accounting period, the better and more modern method is to charge purchases to a Purchases Account, crediting returned purchases to the same account, the balance showing at all times the amount of net purchases; and to credit sales to a Sales Account, charging returned sales to the same account, the balance showing at all times the amount of net sales.

It is necessary when closing the books at the end of the period to bring together the elements of opening inventory, if any, purchases, sales and closing inventory, in order to determine the gross profit which has been made, and which, under the method of using a Merchandise Account, is shown by the credit balance of that account.

This is accomplished by raising on the books, at the time of closing, a **Trading Account,** to which the inventory at the commencement of the

accounting period, if any, is charged, and to which the subsequent purchases are charged, the opening inventory account and the Purchases Account being credited to balance, thus:

TRADING ACCOUNT..................
To INVENTORY AS AT............
" PURCHASES.....................

and by crediting the amount of Sales and closing inventory, closing the Sales Account by a charge to balance, and setting up the inventory at closing, thus:

SALES...................................
INVENTORY AS AT...................
To TRADING ACCOUNT...........

At this stage the Trading Account will contain, in summarized form, all of the elements of a properly kept Merchandise Account, including a credit on account of closing inventory, and will show the Gross Profit which may have been made, by a credit balance.

The balance of the Trading Account, showing Gross Profit, is transferred to Profit & Loss Account, thus:

TRADING ACCOUNT..................
To PROFIT & LOSS................

and the subsequent procedure of collecting in the Profit & Loss Account the items of profit and loss which are necessary to determine Net Profit is the same as if the balance of Gross Profit had been transferred from a Merchandise Account.

If the business is large enough to justify it, a special account may be kept for returned purchases, instead of crediting them to the Purchases Account; and likewise a special account may be kept for returned sales instead of debiting them to the Sales Account. Where these divisions are made, the balance of the Returned Purchases Account is brought into the Trading Account, thus:

RETURNED PURCHASES ACCOUNT..
To TRADING ACCOUNT...........

and the balance of the Returned Sales Account is brought into the Trading Account, thus:

TRADING ACCOUNT..................
To RETURNED SALES ACCOUNT..

thus bringing into the account the same elements as in the illustration where the division into special returns accounts was not made.

It is important to remember that the Trading Account is not maintained throughout the accounting period, but is raised only at the time of closing to collect the elements which are necessary to determine the Gross Profit, and to show by the balance of the account the amount of such Gross Profit, and that it is immediately closed by a transfer of its balance to the Profit & Loss Account.

Profit and Loss Account for Submission with Balance Sheet

The two main purposes for which accounts are kept being the determination of assets and liabilities, and the determination of profits and losses, it is necessary that there should be statements prepared from the books of account which disclose these facts, for the information of the proprietors or others in interest.

The Balance Sheet, which has been described, displaying the assets, liabilities and capital as at a particular time, meets the first requirement.

The Profit & Loss Account, as transcribed from the Ledger Profit & Loss Account, including explanatory detail, showing the Gross Profit made for a certain period of time, with the expenses and losses chargeable against such Gross Profit, and the resultant Net Profit, meets the second requirement.

It is therefore apparent that a Profit & Loss Account may be either the Ledger Account raised under that caption, or the transcript of such account which is prepared for submission with the Balance Sheet, and which may vary somewhat in detail from the Ledger Account.

If a Merchandise Account is used in the accounts, the balance, showing Gross Profit, appears as a credit to the Profit & Loss Account.

If the division into Purchases and Sales Accounts is made in the accounts it is necessary to set up in the Ledger a Trading Account to determine Gross Profit.

In preparing a Profit & Loss Account for submission with the Balance Sheet, if the Merchandise Account is used, the Gross Profit appears as a credit balance. If a Trading Account is used, it is usual to submit it with the Profit & Loss Account proper, to show the items which go to make up the Gross Profit. In some cases it is included as a first division in a statement called **Profit & Loss Account,** or **Trading and Profit & Loss Account,** the balance, Gross Profit, being brought down to the second division of the Account.

The usual condition of a Gross Profit has been assumed throughout; although a loss upon trading is a possibility. It would not affect the handling of the Trading Account in any way.

In displaying such a Trading Account for submission with the Balance Sheet, it is the practice of American accountants to deduct the Inventory from the Purchases, by subtraction on the left side of the statement, instead of making the deduction by a credit entry as is done in the Ledger account. This is done in order to show, without a calculation on the part of the reader, the cost price, and to display such cost price in comparison with the selling price.

The Profit & Loss Account discloses the transactions that have led up to, and resulted in, the condition of assets and liabilities as shown in the Balance Sheet. In connection with drawings and contributions, if any, it connects the position as to capital disclosed in the Balance Sheet, with the position as to capital disclosed in the preceding Balance Sheet. It is this general idea of the purpose and use of the Profit & Loss Account which the student should acquire at this stage, leaving the details until later.

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LECTURE IV.

THE CASH BOOK.

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30 CHURCH STREEET, NEW YORK CITY

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LECTURE IV.

THE CASH BOOK.

Scope of the Journal and the Ledger.

The student no doubt has observed that complete double entry books may be maintained by the use of the Journal and the Ledger; that accounts may be opened, maintained for a business period, and closed for the determination of profit and loss, with no other books than Journal and Ledger necessary to record every transaction.

The Journal and the Ledger are the essential books of double entry bookkeeping. It is true, however, that many other books are in common use. Such books, upon investigation, are found to be but forms of the two basic books, calculated to economize effort in the recording of transactions, while retaining the accuracy and other desirable features of double entry.

Direct Entry to Ledger Cash Account.

It will be recalled that, in Lecture I, it was stated that a complete record of business transactions could be maintained on the Double Entry basis in the Ledger alone, but, for reasons given, that such a method would be impracticable. Consider, for the moment, that such an abbreviated procedure is used for cash transactions, entries being made directly in the Cash Account in the Ledger, without the use of a Journal.

It is evident that the debits, on account of cash receipts, may be entered directly in the Cash Account, and that the customary Ledger explanation, giving the name of the account receiving credit, may be utilized as a guide to the proper account to be credited.

On the other hand, cash disbursements may be entered from the stub of the check book directly to the credit of the Cash Account, and

the balancing charges made to the proper Ledger accounts from such credit Cash Account entries.

The procedure will be apparent from the illustration which follows:

LEDGER CASH ACCOUNT.

1902 Jan.	2	To John Smith, Capital Acct.......		$1,000	1902 Jan.	2	By Expense.........		$50
	3	" A. B. Childs & Co.		200		2	" Purchases........		300
						4	" Jones & Co......		100

It must be borne in mind, in such an assumed case, that entries would first be made in the Ledger Cash Account, balancing postings being made therefrom in accordance with the explanatory detail. Thus, to balance the initial debit entry of $1,000, that amount is credited to John Smith, Capital Account.

Such a procedure amounts to an elimination of the Journal so far as Cash transactions are concerned. The chronological order is preserved, however, so that the Cash transactions may be viewed in the order of their occurrence.

The foregoing method of direct entry in a Ledger Cash Account is rare in practice, and it is given in order to make clear the development and principles of the Cash Book.

The Cash Book.

The ordinary Ledger ruling does not afford space for sufficient explanatory detail, and for this reason, and for other reasons which will appear later, the Cash Account is taken bodily out of the Ledger and bound into a separate book; and instead of a single page containing debit and credit columns, a page is given to debits, and a page to credits, the pages being placed in opposition.

Such a Cash Account, bound in a separate book, in which cash transactions are recorded directly and postings are made to Ledger accounts to balance, is known as a **Cash Book.**

Find the Cash Book where you may, it amounts in principle, whether in its simplest form, or with intricate columnar rulings, to the same thing—

a transposed Cash Account, given the dignity of a distinct binding, in which Cash transactions are entered in the first place, and from which balancing postings are made to maintain the double entry principle.

The following ruling illustrates the simplest form of Cash Book:

Dr. CASH. January, 1902.

Date.		Accounts to be Credited.	Explanatory Detail.	L.F.	Amounts.
1902					
Jan.	2	To John Smith, Capital Account........	investment............	1	$1,000
	3	" A. B. Childs & Co..................	on acct...............	75	200
					$1,200

CASH. January, 1902. *Cr.*

Date.		Accounts to be Debited.	Explanatory Detail.	L.F.	Amounts.
1902					
Jan.	2	By Expense..........................	printing..............	40	$50
	2	" Purchases.........................	10 bbls. X @ $30.......	30	300
	4	" Jones & Co........................	on acct...............	90	100
	5	" *Balance forward*....................	....	..	*750*
					$1,200

The pages are thus seen to be opposite to each other. The Dr., or receipts, page discloses the total cash receipts; and the Cr., or payments, page discloses the total payments, the excess of receipts over payments being the balance of cash on hand.

The initial debit entry is posted to the credit of John Smith, Capital Account, the ledger folio being inserted in the column provided for that purpose. The amount of the second entry is credited to the account of A. B. Childs & Co. On the credit page the inverse procedure is followed for the various accounts indicated are debited.

It will be seen from the foregoing explanation that the procedure, in theory, is the same as in the case of direct entry in the Ledger Cash Account, and that the Cash Book amounts merely to an amplified Ledger Cash Account, in which the original entries are made.

When either the Dr. or the Cr. page is written full, the balance, usually a debit excess, is determined. In case of a debit excess, the amount is entered in red ink as **Balance Forward** on the credit page, and the pages are thus brought to an exact balance, which permits ruling off. On the new Dr. page the balance is shown as **Balance Forward** in black ink.

Another procedure is to carry forward total receipts and total payments, instead of the balance. This method has the advantage of disclosing, by column totals, the total cash receipts, including opening cash balance, and the total cash payments, from the beginning of the month to any later date in the month. If balances were carried forward, to obtain this information it would be necessary to add the totals of the pages.

In the rare case of excess of payments over receipts, which may occur through an **overdraft** on a bank account, the balance will be a credit excess, and will constitute a liability instead of an asset.

Columnar Development.

The saving of effort accomplished by the use of the Cash Book as outlined, lies principally in the elimination of the Journal by making debits and credits directly in the Cash Book.

There is another avenue open for the economizing of effort—by the use of the principle which is expressed tersely in the axiom **the whole equals the sum of the parts.**

In the use of the Cash Book in practice it will be noticed that there are recurring items of disbursements, such as rent, salaries, postage, telegraph tolls, etc., which may all, or nearly all, be charged to an Expense Account.

To economize effort in posting, an inner column is provided on the credit side of the Cash Book, to which the Expense items are carried during the month; and at the end of the month the column is totaled and carried into the regular outside column, from which it is posted to the debit of Expense Account.

Thus, the labor involved in posting to an account that would ordinarily have more charges than any other account is reduced to the posting of one entry a month.

On the debit side of the Cash Book, the receipts on account of cash sales are apt to be numerous, and may be collected advantageously in a separate column of the Cash Book of the ordinary mercantile business. The cash purchases, which appear on the credit side of the Cash Book, ordinarily, on account of their rarity, do not call for a separate column.

A column, therefore, is provided for Cash Sales on the inside of the regular debit column; and at the end of the month the total is carried to the regular debit column, and from it is posted to the credit of Merchandise Account, or, if one is maintained, Sales Account.

It may be argued that an inspection of the Expense Account, or of the Sales Account, at any time other than at the close of the month's business, would not disclose the true condition of the account.

This is true, but the condition of these accounts is rarely a matter of interest more frequently than once a month. If it is desirable to determine the exact condition of either account the proper procedure to follow is to add the total of the unposted amount in the Cash Book to the balance at the beginning of the month.

The Cash Book is capable of indefinite expansion in this direction. It is practicable and desirable, in some cases, to divide the item of Expense into as many as ten subdivisions, with a column for each subdivision.

For the successful carrying out of this method, there should be provided on both debit and credit pages a Net Cash column, in which the net receipts and the net payments respectively are entered, and from which, by ascertaining the excess of receipts over payments, the cash balance may be determined.

The use of the Expense and Cash Sales columns, as well as the Net Cash columns, will be illustrated after a consideration of the treatment of cash discounts.

Discount.

The question of discount frequently enters into the receipt and the payment of cash, not as a cash transaction, but as a concomitant, or a coinciding, transaction. Thus, if a business receives $99 in settlement of a $100 account, payable under 1 per cent. discount, the discount, while no part of the cash transaction, is naturally associated with the cash receipt, and requires accounting consideration at the same time.

If no Cash Book were maintained, the Journal entry would be to debit Cash $99, debit Discount $1, and credit Debtor's Account $100. If the Cash Book heretofore outlined were in use, the $99 would be carried into the debit side of the Cash Book, and the $1 discount would be charged by a Journal entry, the Debtor's Account being credited with $99 from the Cash book and $1 from the Journal entry. This procedure would necessitate the use of two books of original entry to cover the transaction.

Items of discount flow from, and are associated with, cash transactions. For convenience of reference and economy of effort, it is desirable to record such items in proximity to the cash transactions from which

they flow. Columns, therefore, are ordinarily provided in the Cash Book for that purpose. Thus, in the illustration given, the receipt of the $99 is recorded in the Net Cash column on the debit side of the Cash Book; the $1 discount is recorded in the adjoining Discount column; and the total, $100, is carried to a Total column.

The item of $100, being the amount which the cash payment of $99 liquidates, is posted to the credit of the one who makes the payment. Cash is charged with the $99 by the act of entering it in the debit side of the Cash Book; and it remains to charge the $1, representing the expense or loss in securing the cash settlement, to Discount.

It is a rule to carry postings from the debit side of the Cash Book to the credit of Ledger accounts, but it is evident that the effect of displaying the discount in proximity to the cash received, has been to introduce an element into the debit side of the Cash Book which must be placed to the debit of a Ledger account, for discount given, being an expense, or a loss, cannot under any circumstances be credited to Discount.

This inconsistency is allowed to remain during the progress of the month's business, and the total is then carried to the credit side of the Cash Book in the Discount column. From there it is posted, as are all other items on the credit side (with the exception of discounts received), to the debit of the proper Ledger accounts.

The discounts received, which present a similar inconsistency, are allowed to remain in the Discount column on the credit side of the Cash Book during the progress of the month's business, and the total is then carried to the Discount column on the debit side of the Cash Book, and then posted, as are all other items on the debit side (with the exception of discounts given), to the credit of the proper Ledger accounts.

The carrying over is a simple matter. An entry to Discount is made with the explanation, **Discounts given,** (or received) *per contra.* After this, the postings are made as for any other Cash Book entry, as has been indicated.

This procedure, which brings the postings from the Cash Book within the rule that Cash Book debits must be posted to the credit of Ledger accounts, and that Cash Book credits must be posted to the debit of Ledger accounts, permits of a neat balancing of the Discount columns.

There are other methods of handling discount in the Cash Book, notably in the case of the use of Summary Entries in the Journal at month-ends. This matter will be considered fully in a later Lecture.

It is well to note that Discount forms the exception to the rule that nothing but actual cash transactions shall be recorded in the Cash Book.

Illustrative Cash Book.

The following illustration of an eight-column Cash Book makes clear the use of the columns which have been described:

Dr. CASH. January, 1902.

Date.		Accounts to be Credited.	Explanatory Detail.	L.F.	Net Cash.	Dis-count.	Cash Sales.	Total.
1902 Jan.	5	To Balance Forward....	....		$750			$750
	7	" J. Dunn............	1%............	78	99	$1		100
	7	" Cash Sale..........	10 C @ $50	x	500		$500	
	8	" A. B. Childs & Co...	2%............	75	490	10		500
	9	" Cash Sale..........	5 A @ $60.......	x	300		300	
	9	" J. Dunn............	1%............	78	99	1		100
	12	" Cash Sale..........	2 A @ $60.......	x	120		120	
	17	" J. Dunn............	on acct..........	78	200			200
	21	" Cash Sale..........	10 B @ $20......	x	200		200	
	29	" Cash Sale..........	5 B @ $20.......	x	100		100	
	31	" Sales................	total, for mo.....	31				1,220
						12		
	31	" Discount...........	recd. per contra. .	42		20		20
					$2,858	$32		$2,890

CASH. January, 1902. *Cr.*

Date.		Accounts to be Debited.	Explanatory Detail.	L.F.	Net Cash.	Dis-count.	Ex-pense.	Total.
1902 Jan.	5	By Expense............	salaries..........	x	$35		$35	
	7	" Furniture...........	2 desks @ $45 ...	5	90			$90
	8	" Fixtures............	shelving.........	6	110			110
	12	" Expense............	salaries..........	x	35		35	
	14	" Jones & Co.........	2%............	90	490	$10		500
	18	" Expense............	postage..........	x	5		5	
	19	" Expense............	salaries..........	x	35		35	
	25	" Berlin & Co.........	1%............	91	990	10		1,000
	26	" Expense............	salaries..........	x	35		35	
	31	" Expense............	total for mo......	45				145
						20		
	31	" Discount...........	given per contra. .	42		12		12
					1,825			
	31	" *Balance Forward*	....		*1,033*			*1,033*
					$2,858	$32		$2,890

It will be noted that in the case of items, such as Expense, which are posted in a monthly total, the individual item is checked or ticked, and the Ledger page is inserted against the amount finally carried to the Ledger.

The ruling of a Cash Book should depend upon the needs of the particular business. The foregoing example is given merely as a form correct in principle, which illustrates the theory covered.

Labor-Saving Principles.

The illustrations given make clear the two great labor-saving principles of the Cash Book, which are:

1. The elimination of Journal entries for cash transactions, the transactions being entered directly in the Cash Book.
2. The collection of similar items, in distinctive columns, to be posted by totals periodically.

Any further development of the Cash Book must be along the lines of the second principle, by the addition of columns.

The multiplicity of columns and volume of detail, which mark what are ordinarily considered complicated forms of the Cash Book, will not confuse the student if he keeps the two principles clearly in mind.

Ledger Summary Cash Account.

If the Cash Book amounts to a transposed Ledger Account, it is evident that, in order to arrive at a Trial Balance, the balance of cash, as shown by the Cash Book, must be taken into account.

It is sometimes desirable, however, to have the Ledger complete, in order that a Trial Balance may be taken from it without reference to any other book.

In such a case, the cash transactions are carried into a Ledger Cash Account at the end of the month in summary form, so that the Ledger Cash Account is made a summary, by months, of the Cash Book.

This result is accomplished by posting, at the end of the month, the total receipts of cash, as shown by Cash Book, to the debit of the Ledger Cash Account, and by posting the total disbursements to the credit of the Ledger Cash Account.

Or, more scientifically, Journal entries may be passed, debiting Ledger Cash Account and crediting Sundry Accounts for the cash receipts. The first part of the entry is posted and a note is made that the Sundry Accounts have been credited directly from the Cash Book. The inverse procedure is carried out for cash disbursements.

There will, by either method, appear in the Ledger an account giving a summary of cash transactions, to be treated as any other account is treated in arriving at a Trial Balance.

Petty Cash.

All cash receipts should be deposited in bank, and all payments, as far as practicable, should be made by check.

It is usually found necessary to have available a small amount of actual cash to meet expenditures for telegrams, postage, car-fare, etc. Such a fund is known as **Petty Cash.**

A common, but unsatisfactory, method of handling Petty Cash, is to furnish the cashier, or other person handling the fund, with a small amount of cash, say $25, charging Expense and crediting Cash. When the money is expended, another amount is furnished, and so on.

If any expenditure is made from Petty Cash other than one chargeable to Expense, a corrective entry must be passed. For example, if furniture were bought, Furniture & Fixtures would be debited and Expense would be credited.

By this method corrective entries are necessary, and the Cash Book entry for the amount turned over to the cashier does not show the actual items of expenditure. If small cash receipts are not deposited, but taken into the Petty Cash fund, a Journal entry charging Expense and crediting sales or a personal account is necessary; and the situation is further complicated.

Imprest System.

A better method, known as the **Imprest** system, is to draw a check to the cashier for an amount estimated to be sufficient to cover the Petty Cash expenditures for a certain period, say a week, two weeks or a month, and to open a Ledger account in the name of the petty cashier, the amount so advanced being charged, and Cash being credited.

At the end of the week, or other agreed period, the petty cashier presents an itemized statement of his Petty Cash disbursements, and a check is drawn for the exact amount and turned over to him in payment. An entry is made on the credit side of the Cash Book, the same as for any other disbursement, with the proper account, usually Expense, charged, with explanatory detail as to division between car-fare, postage, telegrams, etc.

This procedure restores the Petty Cash fund in the hands of the cashier to its original amount, and the same procedure is followed for the next period.

The original amount stands charged to the cashier in the Ledger account, and no entry is made therein until the final settlement and relinquishment by the cashier of the fund. He then renders his final statement and turns over the balance of cash. Entries are made charging Cash

for the amount of cash turned over, charging the proper accounts for the disbursements, and crediting the Cashier's ledger account to balance.

A Petty Cash book may be used, showing, upon the one hand, the receipts, and, upon the other hand, the disbursements, the latter in columns ruled to show division of expenditures for car-fare, postage, telegrams, etc The totals of these distribution columns will be the total amount of expenditures for which check will be received. The totals of such columns furnish the items for the periodical statements.

Another method is to keep a running account of expenditures, to classify the expenditures in the bill rendered, to attach all vouchers which have been obtained, to have the whole approved, and to file.

No part of the cash receipts of a business should be placed, in the first instance, in Petty Cash. Cash receipts, no matter how small, should be deposited in the bank account.

Bank Accounts and Reconciliation of Cash.

The ordinary procedure of handling cash funds, viz., that of depositing cash in a bank or trust company account, and making payments by checks against such account, has been assumed throughout.

In this case, the net balance of cash as shown by the Cash Book, is the amount by which the total amount of deposits exceeds the total amount of checks drawn.

The bank furnishes what is known as a **Pass Book,** in which the total amount of each deposit is entered as made. The Pass Book should be left with the bank at the close of each month's business to be balanced. The bank adds the deposits, entering any that may have been omitted by failure to present Pass Book when making deposits, lists the paid checks chargeable to the account, and deducts their amount from the amount deposited, and thus shows the resulting cash balance. The paid checks, with adding machine list thereof, are returned to the depositor with the balanced Pass Book.

Such Pass Book balance may not agree with the Cash Book balance, for the reason that there may be checks which have been issued, but which have not been presented to the bank for payment.

Checks are usually numbered, and by arranging the paid checks in their numerical order, the outstanding ones are easily ascertained.

The amount of such outstanding checks deducted from the balance as shown by the Pass Book should give an amount which is exactly equal to the balance as shown by the Cash Book. If there are charges for collection of out-of-town items, or interest credits, they must be taken into account, and Cash Book entries passed to cover.

This procedure is called a **reconciliation of Cash.**

Instead of one bank account, two or more may be maintained. Usually no attempt is made to show the division of deposits and checks between different banks in the Cash Book, but the balances shown by the stubs in the check books, should equal, in the aggregate, the total cash balance shown in the Cash Book. The reconciliation with the banks is carried out in the manner before given.

Statement of Receipts and Payments.

A Statement of Receipts and Payments, or as it is sometimes known, a Statement of Receipts and Disbursements, is one showing the cash receipts and cash payments of a concern for a certain period of time.

A Statement of Receipts and Payments is made in the form of a cash account, the receipts being placed on the debit side under the caption **Receipts,** and the payments on the credit side under the caption **Payments.**

The cash receipts and payments of a concern do not ordinarily disclose the profits for the period covered, for part of the profits may be represented by Accounts Receivable or by other assets which are not converted into cash. In addition, there may be contributions of capital, or the purchase or disposition of assets, all of which, being cash transactions, will be shown in a Statement of Receipts and Payments, but which do not necessarily affect the profit or earnings.

Statement of Income and Expenditure.

A Statement of Income and Expenditure, sometimes known as a Statement of Revenue and Expenditure, or merely as a Revenue Account, is a Statement of the income of an undertaking which properly belongs to a certain period of time, whether actually received in cash or not, and of the charges which are properly an offset to such income, whether actually paid or not.

A Statement of Income and Expenditure is made in the form of a Profit and Loss Account, and will contain the same elements, income appearing on the credit side under the caption **Income,** and expenditure on the debit side under the caption **Expenditure.**

To illustrate the difference between a Statement of Receipts and Payments, and a Statement of Income and Expenditure, the case of rent may be cited. An undertaking might pay its rent for the ten months ending with October, and owe for the two months November and December. In preparing a Statement of Income and Expenditure (that is, a profit and loss account) for the year ending December 31st, it would be

necessary to charge against such statement rent for the entire twelve months, and set up in the accounts a liability for the two months' rent, inasmuch as the rent was a necessary expense incurred in making the profit.

If a Statement of Receipts and Payments were being made up for the same period, the actual cash paid out, which would cover only the ten months' rent, would be carried in, the other two months, of course, not appearing in the Statement.

The foregoing statements are not Ledger accounts, but are statements prepared from the books for the proprietor or for others who may require the information. They may cover several years in time, or only a part of a regular accounting period, as the case may require.

The distinction between these two statements must be thoroughly understood and kept in mind, for the principles involved are far-reaching in effect.

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LECTURE V.

SINGLE ENTRY BOOKKEEPING.

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LECTURE V.

SINGLE ENTRY BOOKKEEPING.

Bookkeeping.

Bookkeeping may be defined as the systematic and chronological recording of financial transactions, showing in respect to the particular undertaking, ownership of values, liability for values, and the acquisition and transfer of values.

The bookkeeping record is maintained in order to make possible at any time the ascertainment of the facts as to amount of assets and liabilities, and the facts as to the increase or decrease of net asset value due to trading or operation.

Upon analysis, it will be found that the minor purposes for which the bookkeeping record is made, fall under one or the other of these two main objects—the determination of assets and liabilities, and the determination of profits and losses. Thus, it may be said that the bookkeeping record is useful as evidence in controversies, but it is apparent that this function falls under the determination of assets and liabilities.

Single Entry Bookkeeping.

It has been pointed out that there are two methods of bookkeeping, viz.:

Double Entry, which is the method of expressing accounting results evolved from the doctrine of equilibrium; and

Single Entry, which, in the broadest sense, may be said to include all bookkeeping devices other than Double Entry.

While under the name of Single Entry may be grouped all bookkeeping methods other than Double Entry, the term Single Entry has a more restricted meaning, in that it is applied ordinarily to a method of bookkeeping in which accounts with **persons** only are kept. These accounts include accounts with the proprietor, showing amount of investment, contributions of capital and withdrawals; and accounts with all individuals, firms and corporations with whom the undertaking has transactions that necessitate a record in books of account. The use of Single Entry is now confined almost entirely to small retail concerns.

The consideration of Single Entry, now about to be undertaken, will be helpful in the specific matter of converting Single Entry books of account to the Double Entry basis,—the connection in which Single Entry books most frequently come to the attention of the accountant. In addition the advantages of Double Entry may be shown, in comparison with Single Entry, more clearly than in any other manner.

Real accounts, other than those that are personal, and Nominal accounts, which in Double Entry bookkeeping supply the elements necessary to effect the equilibrium, and which furnish analytical information useful in the conduct of the undertaking, are not maintained in Single Entry.

Books and Procedure in Single Entry.

In Single Entry, it is the custom to maintain a book of original entry, sometimes known as the **Day Book,** ruled in the usual Journal form, with two money columns to the right of the page. The column to the extreme right is reserved for amounts which are to be posted to ledger accounts. Both debit and credit entries, the former meaning an amount carried to the left of a Ledger account, and the latter an amount carried to the right of a Ledger account, are placed in this column, a notation being made against the entry, by a **Dr.** or **Cr.** abbreviation, to indicate whether the amount is to be posted as a debit or a credit. The inside money column is reserved for detailed amounts.

In opening Single Entry books, the amount of the investment is shown, with the details of the assets which constitute the investment. The investment, the amount of which is to be posted to the ledger account of the proprietor, is carried to the column to the extreme right, while the details of the assets are shown in the other money column.

Liabilities which are an offset against the assets, may be deducted from the assets in the opening entry, as will be illustrated later. Another procedure is to credit the investment account with the total amount of the assets, and by a separate entry to charge the amount of the liabilities

to the investment account, the details of such liabilities being shown in the inside column.

It is thus apparent that the books will be opened with an account in the Ledger showing the net investment. In a partnership business, an investment account is opened for the agreed net asset value contributed by each partner.

Under this procedure the net investment of the owner or of the respective partners is recorded, but the specific assets and liabilities are not recorded except in the case of accounts receivable or payable,—that is, accounts with persons.

For example, John Smith, a sole trader, starts in business with the following assets and liabilities: Cash, $1,000; Merchandise, $4,000; due from John Doe, $1,000, and due to Richard Roe, $500. The opening entry would be made as follows:

NEW YORK, January, 1902.

Ledger Folio		Column for Details	Column for Posting
	2		
	JOHN SMITH, Investment Account................*Cr.*		$5,500.00
	For capital this day invested, details as under:		
	Cash, deposited in Traders' National Bank............	$1,000.00	
	Merchandise, as per Inventory........................	4,000.00	
	John Doe, account receivable.........................	1,000.00	
	Total assets...	$6,000.00	
	Less:		
	Richard Roe, account payable.........................	500.00	
	Leaving Net Investment, as above.................	$5,500.00	
	2		
	JOHN DOE.....................................*Dr.*		1,000.00
	For amount due me, as per opening entry...........	$1,000.00	
	2		
	RICHARD ROE..................................*Cr.*		500.00
	For amount due him, as per opening entry...........	$500.00	

Two entries might have been made in the opening, crediting John Smith, Investment Account, with the amount of the assets, and charging him with the amount of the liabilities. The same net result would be thus achieved.

The entries are posted to a Ledger, which may be ruled in Journal form, with two money columns to right of page, or it may be ruled in the usual Ledger form, and divided in the center, with debit money column to the left of center ruling, and credit money column to the extreme right of page.

It is apparent that, following the foregoing procedure, when the books are opened, they will show all accounts with **persons,** including the **person** that is the proprietor; but that no accounts are opened for such assets as cash and merchandise.

It is customary to maintain a **Cash Book,** in addition to the Day Book, although in many cases the record which is kept in the check book suffices. When a Cash Book is kept, it has the ordinary Journal ruling, the inside money column being reserved for opening balance and subsequent receipts, and the column to the extreme right being reserved for payments, the difference between the two columns showing the cash balance.

Even when a Cash Book is maintained, it is the common practice to enter all cash receipts and payments which affect accounts with persons, in the Day Book, as well as in the Cash Book. All postings are made from the Day Book, the Cash Book merely showing the cash receipts and payments, including expense disbursements, which would not be posted or entered elsewhere.

The following is a usual form of Cash Book, with illustrative entries:

NEW YORK, January, 1902.

Column for Date		Column for Receipts	Column for Payments
2	BALANCE.........as per Day Book................	$1,000.00	
3	CASH SALES......mdse..........................	100.00	
"	JOHN DOE........bal. due (entered in Day Book)....	1,000.00	
4	RICHARD ROE...on acct. (entered in Day Book)....		$250.00
"	RENT.............month of January................		100.00
"	EXPENSE.........stationery......................		18.00
"	*BALANCE*..		*1,732.00*
		$2,100.00	$2,100.00
5	BALANCE..	$1,732.00	

In the case of purchases on credit, no record is made of the merchandise received, but the concern from whom the purchase is made is credited by a Day Book entry. Later, when payment is made, the amount is entered in the Cash Book, the creditor is charged by a Day Book entry, and the account is closed.

Sales on credit are treated inversely. To illustrate a sales transaction: If goods amounting to $500, consisting of five items of $100 each, were sold to John Doe, John Doe's name would be written in, the abbreviation **Dr.** inserted against it, and the $500 carried to the column to the extreme right to be posted, while below would be given a list of the various items, with the amount of each carried to the inside column, which, totaled, would equal the $500.

Statement of Assets and Liabilities.

At the end of the accounting period, the financial position of the undertaking, when the books are kept upon the Single Entry basis, is displayed by what is known as a **Statement of Assets and Liabilities.**

The assets consisting of Accounts Receivable will be shown in the Single Entry ledger, and the balance of cash on hand can be ascertained from the check book or the Cash Book, and verified by counting the actual cash in hand and by having the bank pass book written up. An inventory is made of the other assets, care being taken that none is omitted, and that valuations are made on a conservative basis, with bad debts eliminated. These assets are collected in schedule form, under the caption **Assets,** the amount of each asset being carried to an inside column, and the total of this column to an outside column on the extreme right of the sheet.

The various liabilities are then determined, the Accounts Payable, of course, appearing in the Single Entry ledger. They are then scheduled under the caption **Liabilities,** the respective amounts being carried to an inside column. The total of this column is carried out under the total amount of assets and is deducted therefrom. The balance, in a solvent concern, shows the net investment of the business.

The difference between the assets and liabilities, if the amount of assets be the greater, is the **investment.** If the liabilities exceed the assets, the amount of such excess is the **deficiency.**

The form of the Statement may vary in detail, but, as here given, it is usually a running schedule, with assets stated first and then liabilities, which are deducted from the assets, the difference being the investment.

The term **Statement of Assets and Liabilities** is sometimes used to describe the statement which displays somewhat similar facts, and

which is prepared from Double Entry books of account; but the preferable term for the latter statement, and the one used throughout these lectures, is **Balance Sheet.**

It is not unusual to see Balance Sheet facts displayed in the running form, to economize in space, although the more usual form of the Balance Sheet displays the facts in opposition.

Determination of Profit and Loss in Single Entry.

To determine the **Profit & Loss** (or **Loss & Gain** as it is sometimes called), for an accounting period, in an undertaking in which Single Entry books of account are used, it is necessary to have:

1. The amount of the net investment at the beginning of the accounting period, or a statement of all the assets and all the liabilities at the beginning, in order that such net investment may be determined;

2. Similar facts at the close of the period;

3. The facts as to the withdrawal and contribution of capital during the period.

The difference between the investment at the beginning and at the closing of the period will be the net increase or the net decrease in the investment.

If withdrawals have been made by the proprietor, their amount must be added to the increase in investment, or deducted from the decrease in investment, in order to arrive at the net result as to profit or loss. This procedure is necessary, because assets, whether of cash or property, that are withdrawn by the proprietor for his own use, are not consumed to aid the business, and, therefore, are not expenses of the business. It is frequently the case that the investment decreases, by reason of withdrawals, while there is, as a matter of fact, a profit for the accounting period.

Contributions of capital present a condition the inverse of withdrawals, for such increase in capital has not been produced by the business. Therefore, from the increase of the investment must be deducted the contributions. If, despite the contributions, the investment has decreased, then to the decrease must be added the contributions, in order to determine the loss.

In addition to withdrawals, an amount is sometimes charged to the proprietor in a Salary Account. In determining the net profit, such an amount ordinarily should be treated the same as a withdrawal. The net return or profit is the aggregate which the proprietor secures by reason of his effort and the use of his capital. Therefore, an amount charged as

his salary is fixed arbitrarily, and is in the nature of an advance against the profits which are being earned.

If there have been neither withdrawals nor contributions between the opening and the closing of the accounting period, if the opening investment can be ascertained, and if the closing investment can be determined by deducting from the amount of the assets, correctly valued, the amount of the liabilities, the difference between the opening investment and the closing investment will be the true profit, if there be an increase, and the true loss, if there be a decrease.

These facts are usually displayed in connection with the assets and liabilities, the investment at the opening and the closing being reconciled with the contributions, the withdrawals, and the profit or loss. This procedure is known as the **Resource and Liability** method of determining profit or loss. As distinguished from the **Resource and Liability** method, the method of collecting nominal accounts in Double Entry is known as the **Profit & Loss** or **Loss & Gain** method.

In order to illustrate the construction of the statements which have been described, it will be assumed that John Smith, at the end of an accounting period, say December 31, 1902, has assets and liabilities, as per his Single Entry ledger, as follows: Investment at January 2, 1902, $5,500; withdrawals, $1,800; Accounts Receivable, $6,000; Accounts Payable, $3,000. From his Cash Book it appears that he has $1,250 in bank, and $50 in hand for petty cash disbursements, and his Merchandise inventories at cost $2,500. In addition to the liabilities in the Ledger, he has a note outstanding for $1,000.

It is required that a Statement of Assets and Liabilities be prepared, as at December 31, 1902, as well as a statement showing the results of trading for the year. It is desired that no allowance be made for possible losses in the collection of Accounts Receivable.

Following the procedure heretofore given, the following statement is prepared:

JOHN SMITH.

Statement of Assets and Liabilities as at December 31, 1902, Disclosing Net Profit for the Year 1902.

Assets.			
Cash: In hand	$50.00		
In bank	1,250.00		
		$1,300.00	
Accounts Receivable		6,000.00	
Merchandise on hand		2,500.00	
Total Assets			$9,800.00
Liabilities.			
Accounts Payable		$3,000.00	
Bills Payable		1,000.00	4,000.00
Investment as at December 31, 1902			$5,800.00
Investment as at January 2, 1902			5,500.00
Increase in Investment			$300.00
Add amount of withdrawals			1800.00
Net profit for year			$2,100.00

Comparison of Single Entry with Double Entry.

In viewing the Single Entry bookkeeping procedure which has been outlined, and the statement which it is practicable to produce therefrom, it is evident that, in comparison with Double Entry, Single Entry labors under many disadvantages.

Considering the books of account proper, it is apparent that there is greater liability of error in Single Entry than in Double Entry. Thus, in the case of a sale of goods to a customer, if the amount, after being entered, is not posted to the debtor's account, there is no automatic check in the books acting as a safeguard against a loss of the item. In Double Entry, on the contrary, a record of the amounts of sales being kept, it would be necessary to find and take into consideration the amount of every sale, in order to produce the equilibrium.

It is also clear that in Single Entry no record is made of assets other than Cash and Accounts Receivable, that reliance must be had upon schedules and other memoranda, and that no check against over-

sight is thus provided. Thus, a security owned by a concern might easily be overlooked because of the death or the absence of the principal, or because of his poor memory. If the ownership of such an asset is recorded in a Double Entry ledger, its existence must be noticed in every Trial Balance, and the record will show either its ownership, or its disposition, and the reasons therefor.

It is evident therefore that the complete record of all assets and liabilities maintained in Double Entry is a distinct advantage over the incomplete record maintained in Single Entry.

It is true that there is more labor involved in the first instance in Double Entry than in Single Entry. This difference has been largely overcome in the modern development of Double Entry by the use of additional columns in books of original entry, by which the balancing or nominal elements are carried to the ledger by monthly postings, instead of by daily postings. This principle has already been fully explained in Lecture IV in its application to the Double Entry cash book. By the use of this principle, the work involved in Double Entry is reduced to a point where it is little in excess of that required by Single Entry. It insures all of the accuracy and the analytic benefits of Double Entry, with none of the disadvantages, but with the economy of effort, of Single Entry.

From a study of the illustrative statements which have been given, it will be seen that the only information in respect to trading results is as to the net result for the accounting period. The reasons for the result, whether it be good or bad, are not apparent; and the total amount of business which has been transacted cannot be ascertained therefrom.

No record or only a partial or inadequate record of expenses or losses or of profits being kept, the management cannot detect variations in particular expenses and profits, but is able to consider only the result as a whole after it has been accomplished.

In Double Entry, with expenses and profits recorded and divided into such items as Salaries, Rent, Insurance, Taxes, Discount, and Interest, with the trading accounts of Purchases, Sales, etc., set up, and with the elements divided to as great an extent as the volume of business of the particular undertaking may justify, the status of any particular division may be compared with its condition at the same state of the preceding year's business. Therefore, the corrective work that is found to be necessary can be applied in time to avert possible losses or to increase profits.

Aside from the benefits to be derived throughout the accounting period, the analysis is particularly valuable at the close of the period in reviewing the entire work with a view to increasing the earning capacity of the undertaking during the succeeding period.

The advantages of Double Entry over Single Entry may, in view of the foregoing discussion, be summarized as follows:

1. Less liability of error, through (a) automatic safeguards, and (b) fuller record.

2. Analysis of profit and loss elements, obtained from the accounts used to effect the equilibrium, securing (a) comparison of each element during the accounting period, and (b) comparison in periodical statements.

Underlying Principles of the Profit and Loss Account.

It is useful to learn fully why the Profit & Loss Account, as prepared from Double Entry books of account, discloses the facts as to profit or loss.

The nominal accounts, which are necessary to maintain the equilibrium, record the increase and the decrease of assets and liabilities. Considering first a nominal account recording an expense element, it must be the result of a reduction of an asset or the creation of a liability. For example, rent may be set up as a debit entry; and if it is paid by cash, Cash Account is credited and thereby reduced. If it is not paid, a liability is created and recorded by a credit entry. Hence, a nominal account with a debit balance measures an unfavorable effect, such as the reduction of an asset or the creation of a liability, upon the net asset value in the business.

Inversely, a nominal account with a credit balance measures a favorable effect, such as the creation of an asset or the reduction of a liability, upon the net asset value in the business. Thus, if merchandise that costs \$15,000 is exchanged for \$25,000, the account recording the merchandise may be credited with its cost, \$15,000, to mark its elimination from the assets; and, to preserve the equilibrium, it will still be necessary to credit \$10,000 to a nominal account, in order to measure the increase of asset value. The profit resulting from the extinction of a liability is rare, because liquidation is usually effected by turning over asset value equal to the liability. It might occur in the case of a donation, or the settlement of liabilities at less than their face, but such profit differs from the trading profit which is being considered.

The unfavorable, or debit, balances, are offset at the end of some convenient period, against the favorable or credit balances, in what is known as a Profit & Loss Account. For example, the net profit of \$2,100 achieved by John Smith in the illustration which has been given, it may be assumed, resulted from the transactions displayed in the following Profit & Loss Account:

JOHN SMITH.

Profit and Loss Account for Year Ending December 31, 1902.

Dr.		*Cr.*	
To Salaries	$1,600	By Merchandise, Gross Profit	$10,000
" Wages	2,400		
" Rent	2,000		
" Cartage	600		
" Freight	525		
" Insurance	175		
" Discount	100		
" Expense	500		
	$7,900		
" *John Smith, Drawing Account, Net Profit*	*2,100*		
	$10,000		$10,000

The foregoing Profit & Loss Account means that the assets increased, in the gross, $10,000, against which it was necessary to offset the unfavorable balances, representing decreases of assets or increases of liabilities. The increase of net asset value from trading as shown is thus, $2,100.

In this case not all of the net profit was left in the business, $1,800 being withdrawn and charged to the proprietor's Drawing Account as and when drawn. To this account should be credited the net profit, disclosing the following condition:

JOHN SMITH.

Drawing Account for Year Ending December 31, 1902.

Dr.		*Cr.*	
To Withdrawals	$1,800	By Profit & Loss, Net Profit	$2,100
" *John Smith, Capital Account*	300		
	$2,100		$2,100

The amount of withdrawals was not consumed in making the turnover, and is therefore not taken into the Profit & Loss Account. But the amount measures a reduction of assets, and must be offset against the nominal account measuring the net profit, the excess of the latter being the actual increase of net asset value in the business.

The usefulness of the information derived from keeping a record of all assets and liabilities, and a classified record of their increases and decreases, as disclosed in the foregoing accounts, especially when used in comparison with preceding statements, is too obvious for further comment. Single Entry compares two financial positions. Double Entry does likewise, but submits in the Profit & Loss Account the reason for any changes which may have occurred.

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LECTURE VI

PARTNERSHIP ACCOUNTS

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LECTURE VI

PARTNERSHIP ACCOUNTS

Proprietorship

It is necessary to leave, for the moment, the development of the theory of Double Entry proper, in order to consider the complications that arise through the form of proprietorship known as **partnership.** Heretofore, a single proprietorship, by which is meant an undertaking owned by one person, known as a sole trader, has been assumed.

Partnership

Partnership is the relation created by the association of two or more legally competent persons, by express or implied agreement, for the purpose of contributing capital, skill or labor to a common undertaking, the profits and losses of which are to be shared.

The agreement forming the partnership may be in writing, or it may be oral, or the association of the persons as partners may be implied from their acts, without either an express written or oral contract.

It is usual, and the better plan, for partners to enter into a formal deed or contract of partnership, setting forth the amount of capital which each contributes to the undertaking, the proportion in which the profits and losses are to be shared, the allowance of interest, if any, upon the capital contributed by the partners, and the other matters affecting the partnership.

Division of Profits

The partners may agree upon any division of profits and losses which to them may seem proper, but, in the absence of an agreement as to the division, they will be divided equally, irrespective of the capital contributed or the services rendered.

While this is apparently inequitable, it may not be so in fact, for one partner without capital, through his ability to secure business, may contribute as much to the success of the business as a partner who contributes a large amount of capital. This principle arises frequently in practice in the settlement of partnership accounts.

Accounts

The accounts of a partnership are substantially the same as those of a single proprietorship, except that provision must be made for recording the capital contributed in the proper proportion between, or among, the partners, and for recording their respective withdrawals.

A capital account is opened and maintained for each partner contributing capital, to which is credited the amount he contributes as capital. This is determined from the partnership agreement, or from such other sources as may be available. Subsequent contributions are likewise credited.

Withdrawals, in some cases, are charged directly to the capital accounts, but the preferable method is to open a withdrawal account for each partner, to which withdrawals are charged as made. To this withdrawal account the partner's proportion of the net profit is transferred when determined, and the balance of the account, the net increase or net decrease of capital, is taken to the partner's capital account.

Partnership Formed to Originate a Business

In a partnership formed to originate a business, the books are opened by a Journal entry, setting up as asset accounts the items of cash or property contributed by the partners, and as liability accounts any offsetting liabilities, and crediting the net agreed value contributed by each partner to his Capital Account. This procedure establishes the equilibrium of the Journal entry.

The simplest case would be the contribution of the capital in cash by the partners. Thus, A and B might form a partnership and each contribute $5,000 in cash, in which case the books would be opened by a Journal entry as follows:

CASH..................................	$10,000	
To A, Capital Account............		$5,000
" B, Capital Account............		5,000

This would be followed by a suitable explanation, setting forth the essentials of the partnership contract, or at least referring to it.

Although cash does not ordinarily pass through the Journal, opening entries, whether involving cash or not, should be recorded therein. From

the Journal the amount of cash may be carried to the Cash Book. If a Ledger Cash Account is maintained, the posting to it may be made from either the Journal or the Cash Book.

Considering a more complicated case, if X, Y and Z form a partnership, and X contributes $1,000 in cash, Y contributes $500 in cash and merchandise of the agreed value of $500, and Z contributes real estate, of the agreed value of $2,500, with bond and mortgage thereon of $500, the opening Journal entry would be as follows:

SUNDRIES To SUNDRIES

For partnership of X, Y & Z formed to carry on the business of etc., etc., assets acquired and liabilities assumed, and the respective partners' interests therein, being as follows:

CASH	$1,500	
MERCHANDISE	500	
REAL ESTATE	2,500	
BOND & MORTGAGE		$500
X, Capital Account		1,000
Y, Capital Account		1,000
Z, Capital Account		2,000
	$4,500	$4,500

A different procedure, and one equally correct in principle, would be to make three entries, each dealing with the contribution of a partner. This would show exactly what each contributes, but this can be accomplished, if it is considered desirable, in the explanatory part of the entry in the procedure given.

A Balance Sheet, setting forth the agreed values, should be prepared and signed by the partners, and preferably incorporated in, or appended to, the partnership agreement, in order to make the interests of the respective partners a matter of express written agreement.

Conversion of Single Proprietorship to Partnership

The partnership may be created by the admission of another to a business which has theretofore been conducted as a single proprietorship.

Thus, if John Smith is a sole trader, and his capital as shown by his Balance Sheet is $10,000, and Charles Brown agrees to buy a one-

half interest on the basis of the figures shown in the Balance Sheet, the deal will be consummated by Brown paying to Smith, personally, the sum of $5,000. The cash passes directly to John Smith, and does not enter the accounts of the business.

If, as is most frequently the case, the same books of account are to be used for the partnership, John Smith, Capital Account, should be charged with $5,000, and an account under the caption of Charles Brown, Capital Account, should be opened and credited with a like amount. The entry carrying this into effect should be accompanied with an explanation of the admission of the new member. A Balance Sheet should then be made and agreed to, setting forth the capital of the partners, as a basis for future accounting.

The same result could be attained by payment of the cash into the business, charging Cash Account and crediting Charles Brown, Capital Account, and by a withdrawal of $5,000 in cash by John Smith, charging his Capital Account and crediting Cash Account. The former procedure is better, for it was not the intention that the capital should be, even momentarily, $15,000.

The procedure would be different if the agreement provided that Brown should bring into the business the $5,000 as additional capital. In that case, instead of its being merely a sale of a part interest, or the dividing of the capital already in the business between two people, it would be an increase of capital, and the $5,000 would be brought into the business and charged to the Cash Account, and Charles Brown, Capital Account, would be credited with the amount.

A Balance Sheet prepared under such a condition, as a basis for future accounting, would show, so far as capital is concerned, that Smith contributed two-thirds, $10,000, and Brown one-third, $5,000. Nevertheless, in pursuance of the rule given, the profits and losses would be divided equally unless there was an agreement to the contrary.

Good-will

It quite frequently happens that the vendor, that is, the one who sells, has built up a valuable business and reputation, and believes that the business, as a going concern, is worth more than the book values.

This asset of well known name and reputation is known as **Good-will,** and from its frequent occurrence and importance in transfers and sales of this kind, merits special consideration.

Good-will is the benefit derived from the well known name and favorable reputation of a going concern. Lord Eldon's definition of Good-

will is perhaps the best known—" Good-will is nothing more than the probability that the old customers will resort to the old place."

An amount of actual capital, invested in the conduct of a business with a well known name and trade standing, will bring greater results than the same amount of capital invested in the same place, in a similar business, but without the helpful influence of such a name and reputation.

Hence, it is apparent that Good-will may have an actual value, and it is this actual value that entitles it to be treated as an asset in accounting. As a general principle, it may be raised legitimately on the books of a concern when its acquisition costs the reduction of an asset or the incurrence of an obligation.

Treatment of Good-will

In the case of the establishment of a partnership by the association of an individual with a sole trader, the former proprietor may be compensated for his Good-will by an agreement, by which such an account is raised, the amount thereof being credited to the account of the former proprietor.

Thus, if the net investment were $10,000, and the agreed value of the Good-will $5,000, and the old books showed the Capital Account of John Doe, proprietor, to be credited with $10,000, the new man to contribute $10,000 in cash, the entry would be:

SUNDRIES To SUNDRIES
For partnership this day formed by John Doe and Richard Roe, under the style of
DOE & ROE
to carry on business heretofore conducted by John Doe, value of Good-will and contribution of capital by Richard Roe, being, in accordance with partnership agreement of this date, as follows:

GOOD-WILL....................	$5,000	
JOHN DOE, Capital Acct....		$5,000
For agreed value of Good-will.		
CASH.........................	10,000	
RICHARD ROE, Capital Acct.		10,000
For cash contributed as capital.		

The Balance Sheet would then disclose that there is $25,000 of Capital in the business, of which $15,000 is credited to John Doe and $10,000 to Richard Roe.

Another method would be to pay to the former proprietor the agreed value of the Good-will in cash entirely apart from the books. This would insure to the former proprietor the full realization of the agreed value of the Good-will. If the amount were set up as an asset and credited to his Capital Account, as in the procedure first given, its eventual realization would, of necessity, be uncertain. If the cash were needed in the business, the former proprietor might contribute the cash so received, Cash being debited and his Capital Account credited.

In no event would the incoming man receive credit for any part of the agreed value of the Good-will, but would be credited in his Capital Account for his contribution of capital, which, in the example given, was $10,000. The Balance Sheet, in case of the payment of cash to the former proprietor, would disclose that each had a capital of $10,000. If the business were later sold and the Good-will realized $5,000, the amount would be divided the same as other profits.

Still another method, but one which apportions the benefit of the Good-will between the former proprietor and the incoming man, is for the latter to pay the agreed amount into the Cash Account of the new firm. A Good-will Account is credited with the amount, to be carried at a future time to the Profit & Loss Account and divided between the partners the same as any other profit. It is evident that this method divides the benefit in the proportion of the division of profits, instead of giving the whole benefit to the former proprietor, and achieves a different mathematical result from the procedures before given.

It is apparent that the intangible personal property known as Good-will may be acquired and sold under substantially the same limitations as exist in the case of other assets. Its treatment in accounts will depend upon the agreement in the particular case, and the illustrations given, covering the most common agreements, sufficiently indicate the procedure.

Purchase of Good-will by Firm

In the case of the purchase of a business by a partnership, it is apparent that, if the net difference between the book value of assets and amount of liabilities exactly equals the purchase price, no Good-will Account need be raised on the books of the Vendee. But if the purchase price is greater than such net difference, the assets must be increased in value, or a Good-will account, or other account, raised, in order that the cost may be shown and the Vendor may receive credit for the agreed purchase price.

Thus, in the case of a new firm taking over an undertaking upon the basis of a value greater than the net investment as shown by the books of the old firm, that is, when Good-will is bought in addition to the net asset value as shown by the books, it is often expedient, and entirely legitimate, to raise a Good-will account and charge it with such cost.

In such a case the assets to be taken over, including Good-will, are debited, and the Vendor credited, and the liabilities assumed are credited and the Vendor charged with their amount, leaving the net credit to the Vendor's Account the amount paid for his interest in the business.

The same result is accomplished, and, perhaps, preferably, by passing one entry, debiting the assets, crediting the liabilities, and crediting the Vendor to balance. In either case, the account with the Vendor is charged and closed as and when settlement is made with him.

To illustrate, William Walker, in business as a sole trader, prepares at a certain date a Balance Sheet of his business, as under:

WILLIAM WALKER

Balance Sheet as at..........

Assets.		**Liabilities.**	
Cash....................	$ 1,450	Creditors................	$ 1,475
Debtors.................	1,750	Wm. Walker, Capital Acct.	12,925
Merchandise............	11,200		
	$14,400		$14,400

Messrs. Jones & Baker form a partnership for the purpose of taking over the business of William Walker, and each contributes as capital $7,500 in cash. They agree with Walker to take over the assets of his business, except the cash, and assume the liabilities, paying for his net interest the sum of $14,000. Jones & Baker acquire by this the net interest, which is the difference between the value of the assets taken over, $12,950, and the liabilities assumed, $1,475, being $11,475. The difference between this net interest, $11,475, and the agreed purchase price, $14,000, being $2,525, is evidently the amount which they are required to pay for Good-will.

Assuming that the book values are found to be correct and the Good-will, therefore, as stated, the Journal entries necessary to carry all of

the above transactions into the books of Jones & Baker, including the payment to the Vendor, are as follows:

CASH..................................	$15,000	
To A. J. JONES, Capital Acct.........		$7,500
" ROBT. BAKER, Capital Acct......		7,500
For partnership this day formed by A. J. Jones and Robt. Baker, under the style of JONES & BAKER to acquire and conduct the general merchandizing business heretofore conducted by William Walker, each contributing $7,500 in cash, profits and losses to be shared equally, in accordance with partnership agreement of this date, to which reference is hereby made.		
SUNDRIES To SUNDRIES		
For assets acquired, and liabilities assumed, as per agreement of this date with William Walker, viz.:		
MERCHANDISE....................	11,200	
DEBTORS (as per Schedule)..........	1,750	
GOOD-WILL.......................	2,525	
CREDITORS (as per Schedule)....		1,475
WILLIAM WALKER, Vendor....		14,000
WILLIAM WALKER, Vendor............	14,000	
To CASH..........................		14,000
For payment of balance due.		

A Balance Sheet of the books of the firm of Jones & Baker, prepared after the above entries had been carried into effect, would be as follows:

JONES & BAKER.

Balance Sheet as at........

Assets.		**Liabilities.**	
Cash....................	$1,000	Creditors (as per Schedule)	$1,475
Debtors (as per Schedule).	1,750	A. J. Jones, Capital Acct..	7,500
Merchandise.............	11,200	Robt. Baker, Capital Acct.	7,500
Good-will................	2,525		
	$16,475		$16,475

The agreed purchase price is sometimes less than the net investment as shown by the books. In this case the old book values of the assets should be scaled down, for there is no accounting justification for carrying in assets upon the opening of a business at figures greater than their cost to the undertaking.

This erroneous over-valuation is usually effected by setting up the assets at the former book values and crediting a Good-will or other account with the amount of such over-valuation, this credit later to be carried to Profit & Loss. It is not a profit, however, but simply measures an overstatement of the cost of assets.

We have now considered the acquirement of a business by a firm from three possible viewpoints:

1. Acquirement at a price that exactly equals the investment as shown by the books, which requires no Good-will Account;

2. Acquirement at a price greater than the investment as shown by the books, involving, if values are correctly stated, the setting up of a Good-will Account; and

3. Acquirement at a price less than the investment as shown by the books, which, in the books of the new firm, requires no treatment of Good-will.

Treatment in Books of Vendor

The amount received for Good-will may, upon the books of the vendor, be credited to Good-will account. If this account is already charged with an amount greater than the amount received, the net result will be a debit to Good-will Account, representing a loss through its sale, to be treated as are the other losses in closing the books.

If there is no Good-will Account, or if the amount credited exceeds the amount already standing to the debit of Good-will, a net credit will

result, measuring the profit made, to be treated as are the other profits in closing the books.

In case the business is sold at a price less than the book values, Good-will does not enter into the matter. In such a case the amount received for each particular asset may be credited to the asset account, and if a debit balance remains, it should be treated as a loss. Profits and losses on the realization of assets are divisible the same as trading profits and losses.

Another method is to raise a **Realization & Liquidation Account,** charging it with the book values of the assets and crediting it with the liabilities, the asset and liability accounts being respectively credited and debited to close them out.

The Vendee is charged with the selling price and the Realization & Liquidation Account is credited, and the resulting balance, being profit or loss, is carried to capital the same as other nominal elements. This may include compensation for Good-will and thus obviate the necessity for raising a Good-will Account.

Upon payment by the vendee, the books may be finally closed and balanced by the withdrawal of the cash and an entry charging Capital and crediting Cash.

If this procedure were followed in the case of William Walker, Journal entries would be passed closing the assets, other than cash, and the liabilities, into a Realization & Liquidation Account, which would then be closed into Capital Account, as appears from the following:

REALIZATION & LIQUIDATION ACCOUNT.

Dr.		*Cr.*	
To Debtors	$ 1,750	By Creditors	$ 1,475
" Merchandise	11,200	" Jones & Baker, Vendee	14,000
" Wm. Walker, Capital Acct., profit on R. & L.	2,525		
	$15,475		$15,475

WM. WALKER, CAPITAL ACCOUNT

Dr.		*Cr.*	
To Cash, withdrawal to close books.	$15,450	By Investment	$12,925
		" R. & L. Acct	2,525
	$15,450		$15,450

The foregoing procedure may be used whether or not the question of Good-will enters into the matter. It is especially useful in case the realization and liquidation extends over a period of time and consists of many transactions.

Charges of Good-will

Advertising and other expenses incurred in a business, even though they may help establish a well known name and reputation, should not be charged to Good-will, but should be charged off in the Profit & Loss Account the same as other expenses. Such expenditures may, or may not, result in the creation of Good-will. If the Good-will is sold, and a profit realized thereon, it will then be time enough to carry it into the accounts.

Extraordinary expenses, as for example, an initial advertising expense which is greatly in excess of the normal amount to be expended, may be distributed over a longer time than one accounting period, charging it against Profit & Loss over two or three years instead of one. Even in such cases, however, the quicker it is charged off the more conservative the practice.

Good-will, standing as an asset upon the books of a concern, is always a subject for close scrutiny and should represent only the actual cost of its acquisition. It should not be loaded with expenses incurred in building up the business, and should not be manipulated to produce a favorable result in the Profit & Loss Account.

Interest on Capital

Interest is frequently allowed, under the partnership agreement, upon the capital contributed by the partners, and is a charge against the Profit & Loss Account before the net results are carried to the partners' accounts.

If the concern has sustained a net loss, instead of making a net profit, the interest charges are nevertheless made to the Profit & Loss Account, and the partners' accounts credited with the respective amounts of interest. This, of course, increases the amount to be carried to the partners' accounts as a charge, but the result will, perhaps, be divided equally, or at least upon a basis different from that of capital contributed, which necessitates carrying out the procedure indicated. It is really a matter of adjustment between the partners, usually to reduce to an equitable basis unequal contributions of capital.

No interest is allowable upon capital contributions unless an express agreement is made to that effect.

While the interest upon partners' accounts will appear in the Ledger Profit & Loss Account, in preparing a Profit & Loss Account to disclose the net profit of the business, care must be taken not to carry in such charges as an expense. The net profit is determined regardless of such adjustment between partners, and brought down as a balance in a subsequent division, and against it are charged the amounts to be credited to the respective partners as interest on capital. Such allowances are made to adjust unequal contributions and, in view of the fact that a concern is supposed to have capital with which to transact business, cannot be regarded as an expense.

Additional Contributions of Capital

If partners bring in cash or property from time to time, the proper capital account will be credited with the agreed value.

If the item brought in is property, and its value is agreed upon, any loss upon its subsequent realization must be borne by the firm in the same proportions as any other loss.

If the value of property contributed has not been agreed upon by the partners, the Capital Account of the contributing partner will be credited with the amount of actual proceeds, not with the value he may have placed upon it, without the consent of his partner, at the time of bringing it into the business.

Only the contributions made **as capital** are considered as capital—other contributions would be in the nature of advances or loans to the firm.

THEORY AND PRACTICE OF ACCOUNTS.

APPLIED ECONOMICS AND ORGANIZATION.

BY HOMER ST. CLAIR PACE, C. P. A. (N. Y.)

LECTURE VII.

THE RECORDING OF PURCHASES AND SALES.

THEORY AND PRACTICE OF ACCOUNTS.
APPLIED ECONOMICS AND ORGANIZATION.

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LECTURE VII.

THE RECORDING OF PURCHASES AND SALES.

The Journal.

The Journal, in Double Entry bookkeeping, is a book of original entry, designed, in the first place, to contain all of the original chronological record of financial transactions. The first step in dividing the Journal into different books, for greater economy of effort, consisted of the invention and use of the Cash Book, as has been set forth in a previous Lecture.

After the elimination from the Journal of the cash transactions by the use of the Cash Book, a scrutiny of the remaining entries will disclose the fact that they consist, largely, in the ordinary trading concern, of purchases and sales on credit.

It will be apparent that the credit purchases are principally of merchandise, although the various expenses may, to some extent, find their way into the accounts, through Journal entries, before liquidation. The credit sales, on the other hand, will be almost entirely on account of merchandise. Expenses which are not entered except in the Cash Book as paid, and purchases and sales of merchandise for cash, will be recorded in the Cash Book, and need not appear in the additional records which it is necessary to devise in order to relieve the Journal.

Invoices, Bills and Statements.

An **invoice,** as the term is ordinarily understood, is a detailed list of items of merchandise, with prices, supplied to a purchaser or consignee,

for their use in checking the receipt of the goods. In addition, if the invoice covers a purchase, the items may be compared with the order, and other records, if necessary, in order to determine that the quantity and prices are correct. Upon the establishment of the regularity of the invoice, it should be approved by some one in authority, and then entered in the financial books. Under the definition, an invoice may apply to outgoing, as well as incoming, merchandise.

A **bill** may be defined as a statement of an account, or a claim for an amount due, whether for merchandise, services, or any other consideration.

In common practice, the term **bill** is used interchangeably with **invoice,** although the latter term is more often used in its application to incoming merchandise. It will be seen that an invoice, strictly, is but a list of items of merchandise, with prices, and is not necessarily a claim for an amount due. This is apparent in its use with consignments, where goods are not actually sold. The term **bill** is more comprehensive, and may include items other than merchandise. It is properly used when it covers a statement or claim for an amount due.

The term **Statement of Account** or **Statement** is most frequently applied to the monthly recapitulation of invoice or bill totals which is rendered by a vendor to a vendee. Thus, if during a month, ten different shipments of merchandise were made, a statement would be rendered at the end of the month, showing the amount of each invoice or bill.

Amplification of the Journal Proper.

In pursuance of the principle "the whole equals the sum of the parts," common to modern books of original entry, it will be necessary to collect items of a similar nature in columns, to be posted, as to the personal accounts affected, in detail, and as to the class of transactions in periodical totals.

The original application of the principle to the purchases and sales transactions consisted of adding two money columns to the Journal, one to carry the merchandise purchases, and one to carry the merchandise sales, until the end of the month, the totals to be posted respectively to the debit and credit of the Merchandise Account.

The personal accounts affected are named in each entry, and, in case of a purchase, the creditor's account is credited from the entry; in case of a sale, the debtor's account is charged. The postings to the personal accounts, in conjunction with the total postings, effect the Ledger equilibrium.

The Journal may be ruled in various ways to accomplish this result. The ruling and entries which follow illustrate the procedure:

NEW YORK, JANUARY, 1902

Dr. Purchases	General	L.F.	Names of Accounts and Detail	L.F.	General	*Cr.* Sales
			2			
$6,000		x	MERCHANDISE, 200 A @ $30, 1% 30			
			To J. F. JONES	155	$6,000	
			2			
	$5,000	200	BAGGOTT & CO., 100 A @ $50, 2% 10			
			To MERCHANDISE	x		$5,000
			3			
1,500		x	MERCHANDISE, 100 B @ $15, 1% 30			
			To DENNIS & CO.	160	1,500	
			3			
	75	10	FURNITURE & FIXTURES, 1 desk			
			To DIETZ CO.	173	75	
			5			
	1,250	208	THE BAYONNE CO., 50 B @ $25, 2% 10	x		1,250
			To MERCHANDISE			
			12			
	625	200	BAGGOTT & CO., 25 B @ $25, 1% 30			
			To MERCHANDISE	x		625
			16			
2,800		x	MERCHANDISE, 100 A @ $28, 1% 30			
			To J. F. JONES	155	2,800	
			31			
	4,700	205	BARMON & CO., 100 A @ $47, 1% 30			
			To MERCHANDISE	x		4,700
			31			
	200	110	RENT, Jan.			
			To SMITH REALTY CO.	174	200	
			31			
	25	120	CARTAGE, Jan.			
			To BAKER EXPRESS CO.	175	25	
			31			
$10,300		100	MERCHANDISE, total for month			
			To MERCHANDISE	100		$11,575

Under this method, the personal accounts are posted as the record is made from day to day, and their state may be determined at any time, The Merchandise Account is posted monthly.

Additional columns could be added to cover other classifications, to be posted monthly. For example, an Expense column could be added to

hold items of expense. The development of the Journal in this way, however, is limited by the fact that, in a large business, the transactions are so numerous that a division of the Journal into different books is necessary in order to enable more than one bookkeeper to work upon the records.

The study of the Journal method is useful, not so much on account of its practical utility, although it is still used in various forms, but rather as a means of leading logically to the consideration of the two important books in modern accounting, based upon the principle stated, that are the outgrowth of the method which has been briefly described.

Purchases Book.

If the column in the Journal in which purchases are recorded, and the details belonging thereto, are taken bodily out of the Journal and bound in a distinct volume, there will be produced a book known in accounting nomenclature as the **Purchases Book,** or the **Invoice Book.**

From its Journal origin it will have for each transaction, the date, the name of the concern from which the purchase is made and which is entitled to receive credit therefor, the details of the purchase, and the amount. These are the facts recorded in a simple form of Purchases Book.

The date column occupies the extreme left, and, progressing to the right, there may be provided a Ledger folio column, a column for creditor's name, column for details of purchase, column for invoice number, and column for amount of invoice.

Postings are made from day to day to the credit of the various creditors named, and the proper Ledger folio is placed against the name of each creditor in the column provided for that purpose.

At the end of the month, to complete the double entry, the total of the amount column is charged to Merchandise Account, or to Purchases Account, if purchases and sales are kept in distinct accounts, and against the amount thus carried from the Purchases Book is placed the Ledger folio.

Or, a summary entry may be passed in the Journal, debiting the Merchandise or the Purchases Account and crediting Sundry Creditors, noting that the latter have been posted in detail from the Purchase Book.

As in the method of adding columns to the Journal, the use of the Purchases Book enables one to ascertain the balance of the creditor's

account from the Ledger at any time, while the Merchandise or Purchases Account will show the proper balance only when the postings are completed at the end of the month.

By the use of the method outlined, the work is reduced nearly to the simplicity of Single Entry, but with the balancing and analytical benefits of Double Entry.

If Merchandise alone is passed through the Purchases Book, and there is only one class of Merchandise, or it is not advisable to separate the classes, a single column is sufficient for the amount of the invoices. It is sometimes desirable, however, where items other than merchandise, such as expense items, furniture or fixtures, etc., are purchased on credit, to provide additional columns in the Purchases Book therefor, and, in some cases, it is desirable to classify the merchandise purchased, providing a column for each class.

Thus, it might be desirable to provide a total column, supplemented by three distribution columns, one for Merchandise, one for Cartage and one for Sundries, the creditor receiving the posting from the total column. At the end of the month Merchandise or Purchases would be charged with the total of the Merchandise column, and Cartage with the total of the Cartage column.

The Sundries column, designed to take care of items not falling within the scope of the other two columns, will contain items chargeable to various accounts and, therefore, cannot be posted in total at the end of the month. On the contrary, space is provided next to this column in which to designate the account to be charged, and for Ledger folio, and the charge is made to the particular account.

Thus, by debiting Merchandise or Purchases for the amount of Merchandise, Cartage for the total as shown in its column, and debiting the particular accounts for amounts shown in Sundries column, debits will be made aggregating the total credited to the various accounts with the creditors.

In case the merchandise purchases were classified, and a column given to each class, the total of each column would be posted, ordinarily, to the debit of a Ledger account, opened under a suitable caption, to show the purchases of the particular class of merchandise.

The Purchases Book should be ruled to meet the needs of the business for which it is designed, and the following ruling, in which the transactions given in the Journal procedure are used, is given merely for illustration:

PURCHASES, JANUARY, 1902.

Date	L.F.	Account to be Credited	Details	Inv. No.	Total	Mdse.	Cartage	Sundries	L.F.	Amount
	Cr.									
2	155	J. F. Jones.......	200 A @ $30, 1% 30	210	$6,000	$6,000				
3	160	Dennis & Co.....	100 B @ $15, 1% 30	211	1 500	1 500				
3	173	Dietz Co.........	1 desk.............	212	75			Fur. & Fix.	10	$75
16	155	J. F. Jones.......	100 A @ $28, 1% 30	213	2,800	2,800				
31	174	Smith Realty Co.	Jan. rent...........	214	200			Rent......	110	200
31	175	Baker Express Co.	Jan. cartage........	215	25		25			
	Dr.									
x	x	Total Purchases	....		$10,600					
31	100	Merchandise...	....			$10,300				
31	120	Cartage........	....				$25			
31	x	Sundries.....	....							$275

The use of a Total column provides a check upon the accuracy of the distribution of the items, and is especially useful where there are many columns.

In order to preserve the Double Entry principle, the total of the various columns charged at the end of the month must exactly equal the sum of the credits posted in detail from day to day. The principle is the same, whether one column or twenty be used in the Book, and once thoroughly grasped, mere multiplicity of columns should not confuse.

A great economy of effort is sometimes effected in a Purchase Book by the use of an inside, or indent, column. For example, city printers are apt to carry but little stock, ordering the stock for each job as it is required. This involves, in a business of any magnitude, a great number of credits, each ordinarily small in amount. The labor of entering such invoices in the Purchases Book from day to day, and making the postings, is heavy and out of proportion to the amounts involved.

To relieve this condition, it is frequently advisable to provide an inside, or indent, column, in the Purchases Book. The invoices are held until the end of the month, and are then sorted, so that the invoices from each creditor are arranged in order of dates. The name of each creditor is entered once, and against it, in the indent column, the amount of each invoice is entered. The total of such invoices, being the total amount of purchases from the particular creditor for the month, is then carried into the regular column, and one posting to the creditor's Ledger account is made to cover.

Inasmuch as discounts are figured, in that particular line of business, from the end of the month on the total purchases for the month,

the Ledger account, as posted in the foregoing method, supplies all the information that is ordinarily required. The disadvantage, if any, in the procedure, is that it collects the work to be performed at the end of the month, but this is more than offset by the great saving in entering and posting the items.

A method formerly in common use consisted of pasting into an **Invoice Book** the approved invoices. Either from the invoice itself, or a column provided on the extreme right of the sheet to which the invoices are pasted, the credit amount is posted to the creditor's account, or to a general Accounts Payable Account, Merchandise being charged with the total. This method is clumsy and generally unsatisfactory in use.

Returned Purchases.

Merchandise is frequently returned, for one reason or another, to the vendor, and if accepted, a credit memorandum is received covering the transaction. Such returns are known as **Returned Purchases,** and obviously require treatment in the accounts the inverse of that accorded when the purchase was made. Thus, if Merchandise were charged, and Belding & Co. credited, when the merchandise was bought, upon a return of all or a part thereof it would be necessary to charge Belding & Co. with the purchase price of the returned goods, and credit Merchandise.

The same ruling as that used in the Purchases Book may be used in recording Returned Purchases, so that, if the returns are not numerous, a page in the Purchases Book may be set aside for the returns of the month. The name of the creditor is inserted in the usual column and the amount is carried out and proper distribution made. The creditors are **charged,** and at the end of the month the Merchandise or other accounts are **credited,** being the inverse of the regular Purchases Book procedure.

If the returns are numerous enough, a separate **Returned Purchases Book** may be provided and ruled as indicated.

Creditors' Ledger.

It is usual, in the larger undertakings, to provide a separate Ledger for the accounts of creditors, known as a **Creditors' Ledger** or **Purchase Ledger.** It may consist of a single Ledger, or may be divided into several ledgers, to suit the needs of the particular business.

The approved method is to make the detailed postings from the Purchases Book and Cash Book to the accounts in the Creditor's Ledger, and, in the General Ledger, to operate a summary, or controlling, account

to show in summary form that which is posted in detail to the subsidiary Ledger. The subject of controlling accounts will be considered fully in a subsequent Lecture.

Sales Book.

In the amplified Journal procedure shown, a chronological record of sales was made, the items being posted from day to day to the debit of the customer, and a total posting made to Merchandise or Sales account at the end of the month to establish the equilibrium of the Ledger. No new principles are involved in passing from this procedure to a separate record, known as the **Sales Book,** in which the sales are recorded as made.

While the Purchases Book is liable to carry items other than Merchandise, the Sales Book, owing to the fact that little is sold but merchandise, ordinarily carries nothing else.

It is frequently desirable to divide, by the use of columns, the total sales between classes of goods, in order to show the sales of each class or of each department of the business. In such a case a total column would be used and the distribution made in columns under the desired captions, and at the end of the month the totals of the distribution columns would be credited to the various Ledger Sales accounts raised to conform.

Where it is desirable to keep a record of the sales made by salesmen, for the purpose of computing commissions, or other purpose, distribution columns may be provided in the Sales Book for that purpose. Thus, the total column would show the total sales for the month, and a column would be provided for each salesman and a general column for sales made by the office, the amount achieved by the summation of the distribution column totals exactly equalling the total sales column amount.

The following illustrates the form and use of a simple Sales Book:

SALES, JANUARY, 1902.

Date	L. F.	Accounts to be Debited	Details	Amount
	Dr.			
2	200	Baggott & Co..	100 A, 2% 10	$5,000
5	208	The Bayonne Co	50 B, 2% 10	1,250
12	200	Baggott & Co	25 B, 1% 30	625
31	205	Barmon & Co	100 A, 1% 30	4,700
	Cr.			
	100	Merchandise	total sales for month	$11,575

In lieu of the use of the regular Sales Book, a common method is to bind in the form of a book, blank bills in duplicate, and by the use of a carbon sheet a duplicate is made of each bill. The original, which is perforated for the purpose, is taken out and rendered to the customer, and the duplicate, being a permanent sheet in the book, serves as the original entry from which the posting is made. It is customary to have three such books in operation, one for extra long bills, being one to a page, one for medium length bills, being two to a page, and the third for short bills, three to a page. The totals are carried forward from page to page, and at the end of the month the sales are totaled and posted to the credit of Sales Account.

The labor-saving effected comes from the fact that in making out the bill to be rendered, which would have to be prepared in any event, a duplicate is made which answers as the original entry. The disadvantages are that the books consume a large amount of space, and it is difficult to obtain an idea of how the sales are running from day to day from an inspection of the book, owing to the fact that at most but three sales appear on a page. And again, if it is desirable to divide sales between classes of goods the columnar arrangement cannot be worked out so well by the duplicate-bill method.

There are many forms of sales records in use, but from the procedures given a knowledge of principles and practice, sufficient for the purposes of this Lecture, may be obtained.

Returned Sales.

In the same manner as purchases may be returned to creditors, customers of the concern may return merchandise bought, and, under certain restrictions, receive a credit memorandum for the selling price thereof. Such **returned sales** constitute a condition the inverse of sales, and may be passed through the Sales Book on a page set apart for that purpose. Or, in case the business justifies it, a separate **Returned Sales Book** may be used.

In either case, the procedure is the inverse of Sales. The customers are **credited,** and Sales or Merchandise Account **charged.**

Customers' Ledger.

If the business justifies it, it is usual to provide a Ledger for customers' accounts, known as a **Customers' Ledger** or **Sales Ledger.** It may be a single book, or divided into several books, to meet the needs of the particular undertaking. The Customers' Ledger may be controlled by a summary account in the General Ledger, in the same manner as the Creditors' Ledger.

General Ledger.

The Ledger, in which the accounts other than those with creditors and customers are contained, is known as the General Ledger.

The Creditors' Ledger and Customers' Ledger which have been described are but sections of the Ledger classification. Therefore, in the absence of accounts in the General Ledger which control the subsidiary ledgers, it is necessary to include the accounts receivable, as disclosed by the Customers' Ledger, and the accounts payable, as disclosed by the Creditors' Ledger, with the accounts of the General Ledger, in order to achieve a Trial Balance.

Voucher Record.

In the Purchases-Book method of recording purchases, a Ledger account is opened with each creditor, to which the various debits and credits are posted. Ordinarily, the account with the creditor, disclosing balance due, the total purchases, and other information, serves a useful purpose with a minimum of labor.

In large corporations, particularly railroad corporations, purchases are made from so many concerns that the opening of Ledger accounts becomes burdensome. This is particularly true in view of the fact that, under the method of asking for bids and purchasing from the lowest bidder, the same article may be bought at different times from various traders. Under such conditions many accounts are opened and closed with but a single transaction.

The obvious way to overcome the necessity for individual accounts is to provide a summary account in the General Ledger, to which the total due creditors on account of purchases may be posted as a credit, and to which the total payments may be debited, the resulting net credit disclosing the amount due creditors. This will overcome the necessity for opening a Ledger account for each creditor, but provision must be made for determining the amount due the individual creditor at any time.

The attempt is often made to accomplish this result, in small concerns, by posting from invoices, usually pasted in an Invoice Book in order of dates, to an Accounts Payable Account. Payments made to creditors and discounts taken are charged thereto, and the credit balance should show the total due creditors. This method, correct in principle, is often unsatisfactory in operation because dependence is placed upon memoranda to determine the amount due the undividual. The opening of individual Ledger accounts is, as a general rule, justified in a business small enough to render the use of this method successful.

In large undertakings the successful maintenance of a general, or summary, account with creditors, is insured by the use of the **Voucher Record,** or **Voucher Register,** as the book of original entry, and the auxiliary document known as the **Voucher.**

The term **voucher,** is used, broadly, to designate a document that establishes the accuracy of accounts or other facts. In a more restricted sense a voucher is a receipt, acknowledging the payment of money.

In its use with a Voucher Record, a voucher is a form of receipt, with provision for certain additional memoranda, not essential to the receipt proper, in accordance with the needs of the particular concern. A simple blank form of voucher is as follows:

(Distribution showing accounts to be charged.
This could be shown on back of Voucher.)

IOWA MILLING CO.
To (creditor)....................................Dr.
No................ (Address)..
Terms.............

(Details of items covered by voucher.)

Approved: ....

Approved for Payment: ....
General Manager.

Approved: ....
Auditor.

....190..
RECEIVED of IOWA MILLING CO., the sum of
....——Dollars
in full settlement of above account 100

....

The voucher which is being described should not be confused with the **voucher check.** The latter is a form of check upon which appears, in more or less detail, a statement of the items payment of which is made by the check. The use of the check constitutes a receipt for the items specified. The statement of items appears on the end or back of the check, and is limited as to detail unless a check is used too large for convenient handling by the banks. While it often serves a useful purpose in general accounting, it is particularly useful in such cases as the payment of a dividend, the number and amount of the dividend being printed or stamped on the face of the check, and the endorsed and paid check furnishing a sufficient receipt. The form for use with the Voucher Record is not ordinarily combined with a check.

Upon receipt of an invoice the voucher is prepared and the necessary details filled in. The approval as to price and receipt of goods is indicated by the signature of the proper official. It is then approved by the auditor for entry in the accounts, and finally by the General Manager, or other official having the authority, for payment. A check is drawn for the proper amount and forwarded to the creditor with the voucher. The latter should be receipted and returned to the payer. It is then filed in the order of its number, together with the papers directly applicable thereto.

The voucher is entered in the **Voucher Record,** a book designed, in conjunction with the voucher, to take the place of the Purchase Book and the individual creditors' accounts. In a simple form, it will provide, on one page for the number of the voucher, date, name of creditor, terms and other details, amount, date and manner of settlement and Cash Book or Journal folio. On the opposite side, or page, provision is made for distribution columns, under the captions of the various accounts to which the purchases should be charged. Into these columns the amounts of the vouchers are distributed.

It is apparent that the rulings may vary to meet the needs of different concerns, but the most complicated examples will differ from the foregoing in little except columnar development, and will embrace no new principles.

The ruling and uses of the various columns will be more fully apparent from the following:

VOUCHER RECORD, JANUARY, 1902. (Right page.)

Date	Creditor	Voucher Number	Terms & Details	Amount	Payment	
					Date	Manner
2	Bement & Co..........	1001	net 30............	$850	1-4-'02	C
3	Steele & Bro............	1002	net 30............	1,000	1-10-'02	C
4	Dick & Bye....	1003	1% 10............	125		
13	Bement & Co	1004	net 30............	750		
31	Day & Co..............	1005	net...............	400	1-31-'02	C
31	A. J. Jones..............	1006	net.....	2,000	1-31-'02	BP
				$5,125		

VOUCHER RECORD, JANUARY, 1902. (Left, or distribution, page.)

Mchy.	Tools	Buildings	Supplies	Repairs	Expenses	Miscellaneous Charges		
						Accounts	L. F.	Amount
$700	$150							
		$1,000						
				$75	$50			
550	200							
			$400					
						Real Estate.........	100	$2,000
$1,250	$350	$1,000	$400	$75	$50			$2,000

It should be understood that the foregoing rulings would be placed in opposition, and the distribution made, in accordance with the voucher details, as the voucher is entered. The distribution columns are often placed to the right, instead of to the left, as shown above. This is a matter that is governed entirely by convenience.

A Journal entry would be made at the end of the month, to bring the transactions into the Ledger, as follows:

SUNDRIES To UNPAID VOUCHERS............		$5,125
For January purchases, viz.:		
MACHINERY..................	$1,250	
TOOLS..........................	350	
BUILDINGS......................	1,000	
SUPPLIES........................	400	
REPAIRS.........................	75	
EXPENSES.......................	50	
REAL ESTATE (posted)..........	2,000	

The Real Estate, entered in the column for miscellaneous items, was posted from the Voucher Record, although it is a common custom to recapitulate such items at the month-end and enter in Journal, to be posted therefrom. Thus in the case of several entries affecting Real Estate, the amounts would be added and posted in one total amount.

In the Cash Book, payments to creditors on account of approved vouchers are collected in a column under a suitable caption, and at the end of the month a Journal entry is passed charging Unpaid Vouchers Account and crediting Cash Account. As each payment is made the voucher is checked in the Voucher Record, either by a check mark or by entering date of payment. If settlement is made other than by Cash, as by giving a bill payable, the entry is passed through the Journal, and the Unpaid Vouchers Account will receive the proper charge.

The unchecked vouchers in the Register should equal, in amount, the liability as shown in the Unpaid Vouchers Account. In the illustration given the Unpaid Voucher Account would be as follows:

UNPAID VOUCHERS.

Dr. *Cr.*

1902				1902			
Jan. 31	To Cash.............	1	$2,250	Jan. 31	By Sundries....... ..	26	$5,125
Jan. 31	" Bills Pay. (Journal)	26	2,000				
Jan. 31	" *Balance*........ ..		875				
			$5,125				$5,125
				Feb. 1	By Balance.		$875

The balance due, $875, will be found to consist of the unchecked items on the Voucher Record, viz., No. 1003 for $125 and No. 1004 for $750. The approved and entered, but unpaid, vouchers, should be checked against the unchecked vouchers in the Voucher Record and the total liability as disclosed by Unpaid Vouchers Account.

The Voucher Record is capable of indefinite expansion in the matter of distribution columns. It has been deemed best to illustrate the method with simple rulings and few transactions, in order not to obscure the principles involved.

The advantage of the method lies in the elimination of ledger accounts with creditors and the heavy labor incident thereto. Its chief disadvantage lies in the lack of a record of all the transactions with a particular creditor in form convenient for reference. This, in many lines of business, is a serious defect. It may be overcome, to some extent, by means of an index operated in conjunction with the Voucher Register, showing the total transactions with each creditor.

Bills Receivable and Bills Payable Records.

The Journal having been stripped of cash transactions and purchases and sales on credit, may still have numerous transactions through the receipt or issue of negotiable instruments, usually promissory notes, in liquidation of accounts. These transactions, when numerous, may be recorded, at a saving of effort, in special books of original entry.

The **Bills Receivable Book** is a register of negotiable instruments received, showing date, from whom received, maker, endorser, due date, where payable, rate, amount, and such other information as may be of use. The name of the person from whom received, usually the maker, indicates the account to receive credit, and these personal accounts are posted from day to day. At the month-end the total of the amount column, being the total amount of bills received, is posted to the debit of the Bills Receivable Account, thus establishing the equilibrium of the Ledger. From a special column in the Cash Book, or otherwise, the total credit to the Bills Receivable Account is determined and posted, the balance of this account then representing the amount of unpaid bills on hand.

A special column for cash payments may be provided in the Bills Receivable Book, in which case as payments are made they are entered opposite the particular item.

A ruling illustrating the principle is as follows:

Date	L. F.	From Whom Received	No.	Endorser	Where Payable	Due Date													Rate	Amount	Remarks
						Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.			

The **Bills Payable Book** is a register of negotiable instruments, usually promissory notes, given, showing date, to whom given, due date, rate, amount, and such other information as may be of use. The individuals named are charged, or cash is charged, from day to day as the notes are given, and at the month-end the total of the amount column is credited to Bills Payable Account. Liquidations are charged to this account, so that the credit balance discloses the total notes outstanding. The ruling is substantially the same as the one shown for Bills Receivable, although it is subject to the needs of the particular business.

A renewal of a bill receivable should be passed through the records, the entry being to debit Bills Receivable and credit Bills Receivable. In the Bills Receivable Book the credit is secured by entering it the same as a new bill, indicating Bills Receivable instead of a customer's name, and the debit is included in the total posted at the end of the month. In the column for remarks the notation " Renewed " is entered against the renewed bill. The same principles apply in the case of the renewal of Bills Payable.

A Review of the Journal.

Instead of following the custom of stating, at the outset, that the Journal is a book through which opening and closing entries, summary entries, and extraordinary entries not coming within the scope of other books of entry, are made, and that it must be reserved for such entries, it has seemed preferable to reach this point gradually.

The Journal, in the evolution of Double Entry bookkeeping, has been relieved of the transactions resulting from the receipt and payment of cash, the purchase and sale of merchandise on credit, and the receipt and issue of negotiable instruments, by the use of certain special books of original entry. These books have been presented in the probable order of their invention, stripping the Journal step by step, until, at this stage, it will be apparent why the Journal, in which an entry covering any financial transaction may be made, as a matter of fact embraces but few.

THEORY AND PRACTICE OF ACCOUNTS.

APPLIED ECONOMICS AND ORGANIZATION.

By HOMER ST. CLAIR PACE, C. P. A.

LECTURE VIII.

CONSIGNMENTS AND SETTLEMENTS.

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LECTURE VIII.

CONSIGNMENTS AND SETTLEMENTS.

Definitions.

The word **consign** means to transmit something, by a person known as a **consignor,** to another, known as a **consignee,** to be held in trust for sale or other purpose. That which is consigned is known as the **consignment.** In commercial practice the terms are used in connection with sending merchandise to an agent or factor, to be sold usually on commission. The title of goods remains in the consignor, the factor being intrusted with them merely for the purpose of sale.

A common method of compensating the consignee for his services is a commission at an agreed percentage upon the gross selling price of the goods. There are other methods of compensation. For example, the consignee may receive for his services the amount secured in excess of a stated amount; thus, goods may by billed at a certain price, which is to be the basis of settlement in case the goods are sold, the consignee to receive for his services any amount that he may obtain in excess thereof.

The trader whose principal business is handling merchandise on consignment is known as a **commission merchant.** The trader whose principal business is purchases and sales on the ordinary basis may both receive and send merchandise on consignment, the receipt being called a **consignment inward** and the shipment a **consignment outward** or **shipment.** For the sake of brevity, it is satisfactory to designate goods received on consignment as **consignments,** and goods shipped on consignment as **shipments.**

A **joint adventure** is a form of special partnership for carrying on an undertaking, not permanent in its character, but involving a special enterprise such as the purchase and sale of a particular lot of merchandise, or a speculation in securities. It bears no relation to the subject of consignments, except that a very usual form of joint adventure is the asso-

ciation of two or more persons to purchase and consign merchandise to an agent for the purpose of sale. Joint Adventure accounts will be fully treated elsewhere.

Principles.

During the Middle Ages, the hazards of commerce and transportation rendered uncertain the delivery of merchandise and the consummation of trades. Therefore, merchandise was sold to a great extent by sending it out first upon venture or consignment. The accounting took the form of recording the transactions in regard to the particular consignments or shipments of merchandise in such a way that their outcome as to profit and loss would be disclosed.

The conditions of trade have changed so that the usual method is to make direct sales of merchandise. This takes away the uncertainties of the disposal of the merchandise, and the necessity for a knowledge of the outcome of the particular shipments. From this change in trading practice grows one of the substantial differences between the early and the modern practice of accounting, as carried out by the Double Entry method. In modern accounting, except in the case of consignments, there is no necessity for the maintenance of accounts to show the outcome of specific shipments of merchandise.

Nevertheless, there is still a considerable volume of business transacted on the consignment basis, and it is interesting to note that in its nature it is more or less hazardous, and that, therefore, the old method of keeping a record of the outcome of each consignment is desirable. This is obvious in the produce business, which involves the handling of such perishable articles as fruits, vegetables, eggs and butter, and which is transacted almost altogether on the commission basis. The trader in such produce still declines to assume the risks that would accrue through an absolute purchase, and he merely acts as the factor of the producer. There are lines of business still conducted on the consignment basis in which the uncertainties have been largely removed, but in these cases a tendency may be noted to abandon the consignment method.

The uncertainties incident to the shipment of merchandise upon consignment render necessary the distinctive principle of consignment accounting, namely, that a record of the financial transactions of each consignment, whether sent or received, must be maintained in such a way as to disclose its individual status from time to time, and its final outcome. To carry this into effect, a number is given to each shipment or consignment for the purpose of identification, and the financial transactions in regard thereto are recorded in a distinct ledger account.

The principles underlying the treatment of consignments in accounts are the same, whether they constitute the entire business, as in the case of the commission merchant, or are merely incidental to the main business, as in the case of the trader in the ordinary way. It is intended to set forth these principles, and illustrate them with the procedures used.

Incidental Consignments Inward on Books of Trader.

Goods received on consignment are accompanied by an invoice stating the items, and often the values, which are nominal and do not constitute a charge. Upon receipt of the consignment, a memorandum entry should be made in the Journal, or in a special Consignment Journal, ruled to meet the needs of the business, if the consignments are sufficiently numerous to justify such a book, giving a number to the consignment for identification purposes, and stating the name of the consignor, items received, rate of commission, and such other detail as may be necessary to a complete record. This is a memorandum entry only, no posting being made.

The objection may be raised that this does not bring the transaction into the Ledger, and that it may, therefore, be overlooked. In properly kept memorandum records, this does not follow, and in any event the receipt of the merchandise will usually necessitate the payment of such expenses as freight and cartage, and this provides an opportunity to bring the transaction into the Ledger, and to raise the distinctive account.

A Ledger account, under the consignment number, as, for example Consignment No. 31, is raised, and the expenses incurred through the receipt of the goods are charged to it. Upon the sale of the goods, Cash, if it is a cash sale, or the Debtor, if it is a sale on credit, is charged with the selling price, and the Consignment Account is credited. Any further expenses, as well as the amount of commission due the consignee for his services, are charged to the Consignment Account, and the net credit balance of the account is the amount due the consignor. When payment is made of the balance due the consignor, as disclosed by the Consignment Account, the latter is charged to balance it and Cash is credited.

In the case of several consignments, or of continuing transactions upon the consignment basis, the balances due upon the particular consignments are transferred, when the goods are sold and the balances determined, to a general account payable, opened in the name of the consignor, and the payments to him are then charged to this account. From this ledger account an **account current** disclosing the debits and credits pertaining to the account for a certain period, and the resulting balance, to be described more fully later, may be prepared.

Thus, B received on December 29, 1901, 500 barrels of Merchandise X, shipped by A on December 26, 1901, with an invoice value placed at $7 per barrel, $3,500, to be sold on a commission of 5 per cent. On the date of receipt, December 29, 1901, freight amounting to $465 was paid, and on December 30, 1901, cartage amounting to $35 was paid. On January 9, 300 barrels were sold to Jones & Co. on credit at $10 a barrel, and on January 10, 200 barrels were sold for cash at $11 a barrel, and an Account Sales, to be described later, was rendered.

The transactions will be journalized to illustrate the accounting principles, and, for the sake of simplicity, the cash entries will be included, although in practice they would doubtless be passed through the Cash Book. The Consignment Account, as set up in the Ledger, will be given, in order to show the result of the consignment. The entries and account follow:

Journal or Consignment Journal:

DECEMBER, 1901.

29

Memo. Entry.

For this day received from A, 500 barrels of Merchandise X, commission 5 per cent., being Consignment No. 31.

Journal (Cash entries included):

DECEMBER, 1901.

29		
CONSIGNMENT No. 31	$ 465	
To CASH		$ 465
For freight, 500 bbls. X.		
30		
CONSIGNMENT No. 31	35	
To CASH		35
For cartage, 500 bbls. X		

JANUARY, 1902.

	9		
JONES & CO.		$3,000	
	To CONSIGNMENT No. 31		$3,000
For 300 bbls. X @ $10			
	10		
CASH		2,200	
	To CONSIGNMENT No. 31		2,200
For 200 bbls. X @ $11			
	10		
CONSIGNMENT No. 31		260	
	To COMMISSION		260
For 5% commission on sales of $5,200			

Ledger:

CONSIGNMENT No. 31.

1901				1901			
Dec.	29	To Cash, freight	$ 465	Dec.	31	*By Balance*	$ 500
	30	" Cash, cartage	35				
			$ 500				$ 500
1902				1902			
Jan.	2	To Balance	$ 500	Jan.	9	By Jones & Co., 300 bbls. X @ $10	$3,000
	10	" Commission, 5%	260		10	By Cash, 200 bbls. X @ $11	2,200
	10	" *Balance*	4,440				
			$5,200				$5,200
				1902			
				Jan.	10	By Balance	$4,440

The foregoing Ledger account discloses the balance due A, and would be closed by a debit of $4,440 upon settlement or transfer to the personal account of A.

Assuming that the books of B were closed at December 31, 1901, the debit balance to Consignment No. 31 would be treated as an asset, as it is an advance secured by the consignment of merchandise. The balance of the account would be brought down as indicated, and, on the

Balance Sheet, grouped with similar items. The value of the consigned merchandise on hand does not appear in the books and would not appear in the Balance Sheet.

If advances of cash were made by B to A before actual sales had been made, they would be a charge to the Consignment Account, and the account, to the extent of such advances, would be an account receivable. The factor may pledge the goods on account of advances to his principal, or to reimburse himself for balances due on account. The factor has a general lien on goods in his possession for any balances that may be due him, that is, he may hold the goods for any balance due on the particular consignment, or for balances due on other accounts.

A running, or open, consignment account is often maintained, on which sales are reported monthly and which become an immediate charge against the consignee. In such a case, when the report is not accompanied by a check, interest may be allowed by the consignee on the balance of the account.

Alternative Method.

An alternative method that is not regarded with favor by many accountants on account of the extra labor involved, is carried out by opening two accounts. By this method, when goods are received upon consignment, an entry is made charging a distinctive account, as, for instance, Consignment Account No. 31, and crediting A, Consignment Account, for the invoice value of the goods, with explanation giving a description of the goods, stating the commission to be allowed, and other necessary detail. The price received for the goods is credited to Consignment Account No. 31 as and when sales are made. The balance of the account, when the goods are entirely sold, is the excess of selling price over inventory value of the goods, and is transferred to A, Consignment Account, by a charge to Consignment Account No. 31, and a credit to the former. This amounts merely to a trading account covering the goods consigned.

A, Consignment Account, which, in the meantime, has been charged with freight and other expenses chargeable to the consignment, is charged with the agreed commission, and the balance to the credit of the account is the amount due A. When the indebtedness of A is liquidated, the account is charged to balance.

The argument advanced against this method, aside from the extra labor involved, is that, inasmuch as there was never any real liability to the consignor, such liability should not be shown in the accounts. The liability, however, is nothing more than a consignment, or goods, liability, and is so shown in the caption of the account and is offset by the asset

set up contra. The first method is accepted as the better practice, and the second method is explained mereiy for the purpose of informing the student as to the alternative procedure.

Account Sales.

An **Account Sales** is a statement disclosing transactions incident to a consignment, and is rendered by the consignee to the consignor. The items of merchandise sold, and the prices received therefor, are stated, the total receipts constituting the gross charge to the consignee. The amount of the freight and other expenses inourred, as well as the agreed commission, are deducted, the remainder being the net amount for which the consignee accounts. Unsold merchandise is shown on the Account Sales as a memorandum, usually at the foot of the statement. An Account Sales, prepared in the usual form, to cover the transactions before given, would be as follows:

B, COMMISSION MERCHANT.

No ....

ACCOUNT SALES of 500 bbls. X, received December 29, 1901, from, and sold by order of, and for account of, A:

1902			
Jan. 9	300 bbls. X @ $10......................	$3,000	
10	200 bbls. X @ $11......................	2,200	
			$5,200
	Less Charges:		
	Freight.........................	$ 465	
	Cartage.........................	35	
	Commission, 5%................	260	
			760
	Net Proceeds Due........		$4,440

The form of the Account Sales may differ from the above. For example, the word **By** may precede the sales, and the word **To** the charges, and in the case of the Account Sales covering different classes of merchandise, with numerous sales, a column may be provided for each class, and the total carried out to obtain the total proceeds of sales. It may also be set up in account form, as a transcript of the Ledger account.

Consignments Inward on Books of Commission Merchants.

The accounts necessary to record consignments when handled by a commission merchant do not differ essentially from those used when the handling of consignments is incidental. The approved procedure is to treat the merchandise received in memorandum records until actual financial transactions take place. To illustrate the application of the principles, the methods of a concern selling cloth upon commission will be considered.

The consignments received are entered, upon notice from the receiving department, in what is known as an Invoice Book, providing columns for date, case number, style number, yards, and the name of the mill from which the consignment is received, a page or number of pages being given to each consignor. This is in the nature of a memorandum book and forms no part of the double entry system.

A Sales Book is maintained with columns for date, name of customer, ledger folio, and total amount sold. In addition, distribution columns are provided, one for each consignor or mill whose product is handled.

Upon receipt of notice from the shipping department that a certain lot has been sold and shipped, a note to that effect is made in the Invoice Book against the original entry. An entry is made in the Sales Book charging the customer and crediting the consignor or mill for whose account the sale is made in the column provided for that purpose. At the end of the month, the total sold for each consignor, as disclosed by his column in the Sales Book, is credited to his account.

It is customary to render an Account Sales to each mill weekly from the facts recorded in the columns of the Sales Book. At the end of the month, a statement, recapitulating the Account Sales, is rendered, deducting returns, thus showing the net sales. The charges incurred, which have been charged to the consignor's account as paid, are deducted, as well as the commissions earned, the balance showing the net amount due the consignor, as disclosed by his account.

It will be understood that the consignor's account is credited from the Sales Book, and is charged with expenses, and when the commissions are charged at the end of the month, the balance discloses the amount due. The unchecked items in the Invoice Book will constitute the consignments on hand.

Shipments.

The shipment of goods by the consignor, that results in the consignment inwards with the consignee, requires treatment on the books of the consignor. The desirability of keeping the record so that the outcome

of each shipment may be known, leads, in the usual practice, to an immediate transfer of the cost value of the goods shipped to a distinctive shipment account in the Ledger, numbered for the purpose of identification. This is in contradistinction to the memorandum treatment used in consignments inward until financial transactions take place, although in some cases, as will be explained later, the memorandum method is desirable in the case of shipments.

The most usual procedure in recording shipments is to raise a Shipment Account, with a distinctive number, at the time the goods are shipped, in the General Ledger, or in a special Consignment Ledger, to hold all such accounts, if the shipments are numerous enough to warrant such a book, to which the cost value of the merchandise consigned is charged. Theoretically, the raising of the Shipment Account is the transfer to it of the cost value of the merchandise from the account to which it was charged in the first place. In case a Merchandise Account is maintained, the credit would naturally have to be made to that account, although confusing the cost value of the goods consigned with the credits to the account by reason of sales is an undesirable procedure, as, in fact, is the entire method of using a Merchandise Account.

In case the more modern method of keeping the purchases and sales in distinct accounts is used, the credit can be immediately made to the Purchases Account, although this would impair the statistical value of that account, for the reason that its balance would not disclose either the gross or the net purchases.

Another method, that obviates some of the undesirable features of the others, is to raise a Consignments Account to which the cost value of all merchandise placed upon consignment during the accounting period is credited, the balance of which during the accounting period will, therefore, disclose the cost value of goods shipped on consignment.

If the latter method is used, the entry upon placing the goods upon consignment would be a charge to, say, Shipment Account No. 10, and a credit to Consignments Account, at the cost value of the goods shipped. Any charges, such as freight and cartage incurred in placing the goods upon consignment, are chargeable to the Shipment Account, and in accounting practice are entitled to rank as an addition to the asset value of the goods on consignment. The credits for such charges would be made to Cash or to the proper creditor, and would, of course, not affect, in any way, the Consignments Account.

Upon receipt of an account sales from the consignee, an entry is made charging the consignee, if the account is not settled, or charging Cash or Bills Receivable, if it is settled by cash or bill, with the net proceeds,

and crediting the Shipment Account. As an explanation to the entry, it is well to state the details of charges, and commission of the consignee, as disclosed by the account sales. If the entire amount of goods on the particular shipment is sold, and the procedure outlined carried out, the Shipment Account will disclose the net profit or loss on the shipment, to be carried to the Trading Account or Profit & Loss Account at the time of closing the books.

The procedure will be illustrated by using the transactions given in the Consignment of A to B. The transactions will be journalized, including cash entries, and the Shipment Account, Consignments Account, and Personal Account of B, set up.

Journal:

DECEMBER, 1901.

26			
SHIPMENT No. 10		$3,500	
To CONSIGNMENTS			$3,500
For consigned B, 500 bbls. X, to be sold upon 5% commission.			

JANUARY, 1902.

13				
B.			4,440	
To SHIPMENT No. 10				4,440
For sold: 300 bbls. X @ $10		$3,000		
200 bbls. X @ $11		2,200		
Less Charges:		$5,200		
Freight	$465			
Cartage	35			
Commission 5%	260			
		760		
		$4,440		

Ledger:

SHIPMENT No. 10.

1901				1901			
Dec.	26	To Consignments.....	$3,500	Dec.	31	*By Balance*..........	$3,500
1902				1902			
Jan.	2	To Balance..........	$3,500	Jan,	13	By B...............	$4,440
	13	" *Balance*..........	940				
			$4,440				$4,440
				1902			
				Jan.	13	By Balance (profit)...	$940

CONSIGNMENTS.

				1901			
				Dec.	26	By Shipment No. 10..	$3,500

B.

1902							
Jan.	13	To Shipment No. 10..	$4,440				

Assuming that the books were closed at December 31, 1901, the debit balance to Shipment No. 10, $3,500, being the cost value of goods shipped upon consignment, would be treated as an asset. On the Balance Sheet, it would be stated as inventory upon consignment. Had expenditures such as freight and cartage been incurred in placing the goods upon consignment, it would be allowable to charge them to the Shipment Account and treat the combined amount of inventory value and such expenditures as asset value.

The balance to the Consignments Account, being an amount withheld from the credit side of the Merchandise Account, or the Purchase Account, for the reasons stated, may be credited to either, or to a trading account. That this is correct in principle may be seen from the fact that in the case given, it is merely inventory, and that this is, in effect, the same as is done with the inventory of merchandise not placed on consignment.

That it would be correct, in case the goods have been sold, to credit it likewise, may be seen from the fact that it represents cost of goods sold, withheld for the time being from the Merchandise Account or Sales Account. In connection with profit or loss, to be transferred from the shipment account, it would give the element of sales.

Thus, the entire amount standing to the credit of Consignments Account at the end of the accounting period, representing cost of goods sold on consignment and cost of inventory on consignment, may be credited to Merchandise Account or Trading Account, whichever is used. An analysis between the two elements may be made if desirable, and the cost of goods sold may be combined with the results transferred from the shipment accounts to determine the net selling price of goods sold on consignment, if such course is desirable.

In any event, merchandise consigned must not be treated as sales at least until actual sales are made and it passes from the consignment status.

Alternative Method.

An alternative method is based upon the theory that a shipment of merchandise upon consignment amounts merely to a transfer of stock from warehouse to the possession of the consignee, and requires no entry other than a memorandum record of such transfer until financial transactions actually take place. For the purpose of making the memorandum record, a Shipments Book is maintained, in which a record is made of the lots of merchandise sent out upon shipment, giving a distinctive number to each shipment and details of goods shipped. In case many shipments are made to one consignee, it is sometimes desirable to allot a special page in the Shipments Book to such consignee. As the shipments are sold and account sales received, they are checked from the Shipments Book, so that an inspection of this book, if properly kept, will disclose the stock out on shipment. Especial care is necessary in keeping such a book, for in the absence of the necessity of making it prove with other records, the entries may be carelessly made. It answers its purpose well enough if properly kept. In the case that shipments are so rare that a special Shipments Book is not justified, a memorandum Journal entry may be made in the same manner as was suggested to record the receipt of consignments inward.

Upon receipt of an account sales covering a shipment, entries are passed, charging the consignee with the net proceeds, and crediting the amount to a Sales Account, or to Merchandise Account if the latter is kept. It would be practicable to credit such amounts to a Shipment Sales Account, to be transferred to the Trading Account at the end of

the period, if it were desirable to make the segregation between sales on shipments and sales on the ordinary basis.

If charges were prepaid on shipments, they could be charged to a general account called Freight and Shipments. At the end of the accounting period, this account would be analyzed, and the charges on outstanding shipments would be retained as a deferred charge or asset to be added to the amount of the merchandise on shipment, and the nominal portion would be carried as a charge to the Sales Account, or to the Shipment Sales Account if the latter is maintained. It will be noted that in this procedure, for the sake of brevity, the distinctive principle of a ledger account for each shipment is omitted. Reliance is had upon the account sales and other detached papers for information as to the outcome of the particular shipment.

For inventory purposes the unchecked items in the Shipments Book disclose the goods on shipment to be taken into stock. The amount would be charged to Inventory on Shipments, and credited to the Trading Account or Merchandise Account if the latter is maintained, the same as other inventory. On the Balance Sheet of the consignor, it would appear as Inventory upon Shipment.

The successful use of this alternative method depends almost entirely upon the correct handling of the memorandum records covering the shipments. The method first given would probably give the better results under ordinary circumstances.

Accounts Current.

Credit transactions involve, for the purpose of verification and agree ment, the exchange of written documents or statements, of which the invoice, bill, statement, and account sales, that have been sufficiently described in this and previous lectures, are types. Another common form heretofore referred to, and one that may be described conveniently at this juncture, is known as an **Account Current.**

An **Account Current** is usually a transcript of a ledger account, disclosing the charges that have been made to an individual, firm or corporation, for a certain period of time, and the credits that are proper offsets to such charges. The account is usually brought to a balance, which if a debit, measures the amount receivable on the account, and if a credit, the amount payable on the account. The term **open account** is often used as synonymous with **account current,** either describing a statement that discloses a series of charges and credits between two parties, that is still continuing.

An **Account Stated** is an account rendered to which the parties have expressly or impliedly agreed. To maintain an action upon an account stated, it has been held that it must appear that the account has been

balanced and rendered, with an assent on the part of the defendant, either express or implied, to the balance. The acceptance of an account rendered, without objection within a reasonable time, will render it an account stated, and it will not be necessary to prove the items that result in the balance. In the case of fraud or mistake, such an account may be impeached, but not otherwise. It will be seen from the foregoing that an account current, when it is agreed upon, becomes an account stated. This may come through lapse of time, without objection on the part of the one to whom the account is rendered, although the better and more usual course is to accept the account and thus make it an account stated beyond question.

In the absence of interest charges or allowances upon the items of an open account, the rendering of an Account Current amounts to nothing more than transcribing the debit and credit amounts and bringing down the resultant balance. In many lines of business, however, by express agreement or trade custom, the equities of the parties are conserved by the calculation of interest upon the debit and credit items that enter into an account current. Thus, if a factor, credited the account of his principal with the proceeds of the sales of various lots of merchandise during the month, but did not remit for the same until a subsequent date, the principal might be compensated for the loss of the use of the proceeds by interest calculated upon the various amounts from their respective dates to the subsequent date of settlement.

If a payment were made on account during the interval thus covered, the interest upon such payment, from its date to the subsequent time of settlement, would be deducted from the interest upon the credits to the account of the principal, to arrive at the net interest charge that should be made against the factor.

There are several ways in which the interest may be calculated. The method that has been indicated is to compute interest at the agreed rate upon each debit item from its date until the desired subsequent date, and upon each credit item from its date until the desired subsequent date. If the interest on the credit items is greater than the interest on the debit items, such excess is the net amount of interest to be credited to the account; if the interest on the debit items exceeds the interest on the credit items, such excess is the net amount of interest to be charged to the account.

In rendering the account, it is usual to provide two extra columns on the debit side, one to contain the number of days for which interest is to be calculated for the particular item, and the other to contain the amount of such interest. For the same purpose, two columns are added on the credit side.

The difference between the interest columns will indicate a net credit or charge on account of interest as the excess may be a credit or debit balance. The difference is carried to the interest column contra to balance, and is also carried to the regular debit money column, if a charge, or to the regular credit money column, if a credit. This is the method used in many lines of business, including stock brokerage.

The method will be readily apparent from the following illustration:

HENRY SMITH
in account with
Dr. *July*, 1902. CARLING & CO., Factors. *Cr.*

Date	Item	Amount	Time (d'ys)	Interest (6 %)	Date	Item	Amount	Time (d'ys)	Interest (6 %)
1902 July 23	To Cash............	$2,000.00	8	$2.67	1902 July 1	By Account Sales ...	$1,000.00	30	$5.00
" 30	" "	1,000.00	1	.17	" 10	" " " ...	2,500.00	21	8.75
July 31	*To Interest, 6%, contra*	....	.....	14.41	" 13	" " " ...	500.00	18	1.50
" 31	*To Balance down*.....	1,814.41	.....	....	" 16	" " " ...	800.00	15	2.00
					" 31	" Interest, net credit contra.........	14.41	.....	....
		$4,814.41		$17.25			$4,814.41		$17.25
					1902 Aug. 1	By Balance.........	$1,814.41		

Another method of arriving at the net charge or credit on account of interest is to determine the balance of the account from day to day, and calculate the actual interest upon such balance for the time that it exists. This is particularly useful where the balance is a matter of continual interest, and is likely to remain either a debit or credit balance steadily. It makes no difference in the result, of course, whether interest be calculated on the total debit and credit items, and the difference taken, or whether the difference between the debits and credits be determined and the interest calculated thereon. The procedure will be clear from the treatment according to this method of the facts before given. It is as follows:

HENRY SMITH
in account with
July, 1902 CARLING & CO., Factors.

Date	Item	Dr.	Cr.	Balance	Days	Interest 6 %
1902				*Cr.*		*Cr.*
July 1	By Account Sales..........		$1,000.00	$1,000.00	9	$1.50
" 10	" " "	....	2,500.00	3,500.00	3	1.75
" 13	" " "	....	500.00	4,000.00	3	2.00
" 16	" " "	....	800.00	4,800.00	7	5.60
" 23	To Cash..................	$2,000.00	....	2,800.00	7	3.26
" 30	" "	1,000.00	....	1,800.00	1	.30
" 31	By Interest, 6%..........	....	14.41	....	......	$14.41
July 31	*To Balance*...............	1,814.41	....	....	......	....
		$4,814.41	$4,814.41	....	......	$14.41
Aug. 1	By Balance...............	....	$1,814.41	$1,814.41	......	....

The rulings in bank ledgers proceed upon the plan of the last statement, in order that the balance of the account, which is a matter of vital interest, may be disclosed from day to day. In case of the allowance of interest upon a depositor's balance, the interest, in ordinary practice is not credited from day to day, but is calculated periodically, say once a month or once a quarter. Referring to the illustration, interest on $1,000 for 9 days would equal interest on $9,000 for one day. Multiplying by the number of days, the following is obtained:

9	x	$1,000	=	$9,000
3	x	3,500	=	10,500
3	x	4,000	=	12,000
7	x	4,800	=	33,600
7	x	2,800	=	19,600
1	x	1,800	=	1,800
		Total.................		$86,500

This is the amount, $86,500, upon which interest must be calculated for one day. Pointing off two places gives $865, interest at 6 per cent. for 60 days, and dividing by 60, to obtain interest for one day, gives the same result as obtained in the illustration, viz.: $14.41.

In practice the banks calculate on the even hundreds. This would take two places off each product, and off the total, so that the total could be divided by 60, or, still shorter, disregard the cipher on the 60, point off one place, and divide by 6. Taking the figures above, leaving off the two places, gives 865; pointing off one place, gives 86.5, and dividing by 6, gives result, $14.41.

In case the balances change frequently, the multiplication may be avoided by carrying out the balance for each day and adding to obtain the amount on which to calculate interest for one day. If the balance for 9 days is $1,000, the same result is obtained by carrying out the $1,000 nine times and adding, as by multiplying $1,000 by 9. This is the more usual course in case the balances are subject to frequent changes.

THEORY AND PRACTICE OF ACCOUNTS.

APPLIED ECONOMICS AND ORGANIZATION.

BY HOMER ST. CLAIR PACE, C. P. A. (N. Y.)

LECTURE IX.

THE LEDGER AND CONTROLLING ACCOUNTS.

Theory and Practice of Accounts.
APPLIED ECONOMICS AND ORGANIZATION.

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LECTURE IX.

THE LEDGER AND CONTROLLING ACCOUNTS.

Ledger Development.

The use of a single Ledger would, under usual conditions, be clumsy and unsatisfactory in a business large enough to justify the use of the modern columnar books of original entry that have been described in previous lectures. Therefore, it is necessary to consider more particularly the Ledger, its development, and its adaptation to the requirements of modern accounting in an undertaking of considerable size.

In a small business, where the accounts may be conveniently carried and handled in a single Ledger, it is usual and satisfactory to group the accounts in the Ledger into three divisions according to their nature, viz., Real Accounts, Nominal Accounts and Personal Accounts. Thus pages from 1 to 100 might be allotted to Real Accounts, from 101 to 200 to Nominal Accounts, and from 201 to 500 to Personal Accounts. The Personal Accounts should be subdivided into Accounts Receivable and Accounts Payable. The classification is often deviated from and the Capital and Drawing accounts of the proprietor, or partners, stated first, and the location of Nominal Accounts and Personal Accounts may be reversed.

The classification indicated is useful in posting and in referring to the accounts, as the nature of the account indicates approximately its location in the Ledger. It also permits of a convenient grouping of the accounts in the trial balance that is useful in studying the condition of the accounts, and in the preparation of statements.

When the volume of business is so large that the one Ledger is inadequate, additional ledgers are added, but the division of accounts as between the different ledgers does not ordinarily follow, as in the single Ledger, the classes of Ledger accounts. In the first stage of development beyond the single Ledger a division is made into three ledgers, as follows:

1. **Customers' Ledger,** or, as it is often called, **Sales Ledger,** designed to contain the accounts of those who are indebted to the undertaking, including, it may be, Bills Receivable.

2. **Creditors' Ledger,** or, as it is often called, **Purchase Ledger,** designed to contain the accounts of those to whom the undertaking is indebted, including, it may be, Bills Payable.

3. **General Ledger,** designed to contain all of the accounts pertaining to the undertaking that do not fall within the scope of the Customers' Ledger or the Creditors' Ledger.

If the volume of business justifies it, there may be a still further division of the Customers' Ledger or the Creditors' Ledger, either alphabetically or geographically. Thus, the accounts receivable may be divided into two ledgers, one containing those accounts beginning with the letters from A to M, and the other those from N to Z; or, geographically, one ledger may contain accounts with city customers, the other, accounts with out-of-town customers.

It is often desirable that the financial position and earning capacity of the undertaking may not be common knowledge among the office employees, and to guard against such a contingency the General Ledger may be divided into a **Private Ledger,** containing the Real Accounts, Capital Account and the Profit & Loss Account, and a **General Ledger,** containing the other ledger accounts. The Private Ledger is usually in charge of the proprietor, a partner, a confidential clerk, or the firm's accountant. Instead of thus dividing the General Ledger, some firms prefer to treat the General Ledger itself as a private book, to be kept by one in the confidence of the management. The use of the Private Ledger will be more fully considered later.

While there may thus be three or more ledgers, it is evident that each contains but a part of the accounts which, to obtain a Trial Balance, must be considered as a whole, and which, in the small undertaking, are contained in a single Ledger.

The location of an error, in an attempt to arrive at a trial balance from the books of a business so small that the accounts can be handled conveniently in one ledger, is not a serious matter, but considerable labor is involved in checking over accounts numerous enough to justify the use of three or more ledgers.

The work is further complicated by the fact that, in the larger undertakings, several bookkeepers are employed on the accounts. Without special provision in the methods used, the error cannot be localized, in advance, to a particular ledger and assigned to the bookkeeper in charge thereof, but a general checking of the ledgers must be instituted.

To secure this localization of error in advance, and for other important reasons that will appear, **Controlling Accounts,** sometimes called **Adjustment Accounts** or **Summary Accounts,** have been devised.

Controlling Accounts.

In a system of accounts that embraces Controlling accounts, there is one Ledger, usually the General Ledger, that has within it all of the elements necessary to effect a Trial Balance.

Within it are not only the ordinary detailed accounts that fall within its scope, but in addition controlling or summary accounts that disclose, in summary form, by reason of monthly postings, the transactions that are posted in detail from day to day in subsidiary ledgers.

Thus, there may be a Customers' Controlling Account that discloses, by its balance, the total amount due from customers. The individual accounts with customers are kept in a Customers', or Sales, Ledger, and the debit balances in that ledger, in the aggregate, exactly equal the debit balance of the Customers' Controlling Account in the General Ledger.

Likewise, there may be a Creditors' Controlling Account, the credit balance of which exactly equals the total credits of the individual accounts with creditors in the Creditors', or Purchase, Ledger.

The manner of bringing this about is worthy of careful study, for the principle is one of great importance in the modern development of accounting. The principle will be illustrated with customers' and creditors' controlling accounts, although its application may be extended to the control of factory accounts by the general financial books, the control of the receipt and issue of stores, the control of departments and tax levies in municipal accounts, and, in fact, to innumerable conditions throughout accounting.

Customer's Controlling Account.

To open a Customers' Controlling Account in the General Ledger, after a trial balance is effected to insure accuracy, the sum of the debit balances of individual customers' accounts is charged to it, and the individual accounts are credited and thus closed out. This may be done by a Journal entry. The individual accounts are then opened in the Customers' Ledger, the Journal entry supplying the information in proved and convenient form. If it were the original opening of the books, the credit would be to Capital.

An illustrative skeleton Journal entry is as follows:

CUSTOMERS' CONTROLLING ACCOUNT To SUNDRIES

For opening of controlling account, and closing of individual customers' accounts, as under:

JOHN SMITH..............................
ROBERT BROWN..............................
MYRON BENSON & CO..............................
ETC., ETC..............................

The controlling account is usually brought to its true state by summary entries at month-ends, preferably passed through the Journal.

The sales, for example, are recorded from day to day in the Sales Book, and the charges are made to the individual customers' accounts in the Customers' Ledger, so that, in connection with entries posted from other books of original entry, the state of a customer's account may be determined at any time. The total sales for the month, as disclosed by the summation of the Total column in the Sales Book, is charged by Journal entry to Customers' Controlling Account, and credited to Sales Account, the credit being the same as would take place were no controlling account used. It will be clear that this amounts, in the General Ledger, to posting the total charges in one amount to a controlling, or summary, account, the individual debits having been made in a subsidiary ledger.

An illustrative entry is as follows:

CUSTOMERS' CONTROLLING ACCOUNT........
    To SALES...................................

In case of returned sales, the procedure would be the inverse of that carried out to record the sale of the goods.

In the Cash Book, provision is made on the debit side for a Net Cash column, a Discount column, and a Customers' column, the latter, in case of a payment under discount, containing the total of the first two. Thus, upon receipt of $99 from a customer in payment of an account of $100 under one per cent. discount, the $99 is entered in the Net Cash column, the $1 in the Discount column, and the $100 in the Customers' column. The customer is immediately credited in his account in the Customers' Ledger with the $100. The totals of the Cash and Discount columns are available at the month-end for summary entries, Cash and Discount being charged and Customers' Controlling Account being credited.

An entry to illustrate the principle is as follows:

SUNDRIES To CUSTOMERS' CONTROLLING ACCOUNT
  CASH..
  DISCOUNT..

If a Bills Receivable Book is kept, the bills will be entered from day to day, and the accounts of the respective customers, from whom the bills are received, will be credited in the Customers' Ledger. At the end of the month, a summary entry is passed, charging Bills Receivable Account, kept in the General Ledger, and crediting Customers' Controlling Account, with the total of the notes received from customers during the month.

In case a Bills Receivable Book is not kept, the bills will be entered in the Journal. Bills Receivable account will be debited, and the cus-

tomer's account, kept in the Customers' Ledger, will be credited for each transaction. Therefore, for the summary entry at the end of the month, it will be necessary to determine the total amount of such entries from the Journal, and debit Bills Receivable account with it. The amount is ticked off without posting, it being noted that the entries have already been posted in detail to Bills Receivable Account. Customers' Controlling Account is credited to balance the amount of the debit.

The entry would be:

BILLS RECEIVABLE..............................

To CUSTOMERS' CONTROLLING ACCOUNT

The Customers' Controlling Account would then disclose the transactions with customers in summary form. Assuming figures for the purpose of illustration, the procedure will be made clear from the following form of account:

Dr. CUSTOMERS' CONTROLLING ACCOUNT. Cr.

1902				1902			
Jan.	1	To Balance (total due from customers).......	$20,750	Jan.	31	By Cash & Discount (total for month)......	$17,100
"	31	To Sales (total for month)...............	24,125	"	31	By Bills Receivable (total for month).........	900
				"	31	By Balance.............	26,875
			$44,875				$44,875
Feb.	1	To Balance (total due from Customers)......	$26,875				

It will be apparent that, if the Customers' Ledger is properly opened, so that, at January 1, 1902, the debit balances of the accounts equal the balance shown in the Controlling Account, and the totals have been properly taken off, entered and posted, the combined balances of the customers' accounts must be brought to an absolute agreement with the Controlling Account. If an error, therefore, has been made in posting to a customers' account it is immediately localized by the failure of the Customers' Ledger to prove, and the searching of the remainder of the accounts for the error is avoided.

Creditors' Controlling Account.

The Creditors' Controlling Account is opened by a credit to it of the total amount due to creditors, as disclosed by the books when their accuracy is determined by a trial balance, and the individual creditors' accounts in the General Ledger are debited to close them. The individual accounts with the creditors are then opened in the Creditors' Ledger.

The information for this latter procedure may be obtained from the Journal entry if a Journal entry is used as, in many cases, is preferable.

The following entry illustrates the principle:

SUNDRIES To CREDITORS' CONTROLLING ACCOUNT

For opening of controlling account and closing of individual creditors' accounts, as under:

DAVIS & CO..

JAMES BROS...

B. G. SEARLE.......................................

ETC., ETC..

It will be seen that this amounts to a consolidation of the accounts payable into one account in the General Ledger, and the opening of a subsidiary ledger for the individual accounts.

As in the case of the accounts with customers, if the total credits and the total debits thereafter entered in the individual accounts are carried to the respective credit and debit side of the Creditors' Controlling Account, its balance will equal the combined balances of the subsidiary ledger.

A record of the purchases will be kept in a Purchases Book, or similar record, from day to day, and from it the creditors will be credited with their respective amounts in the individual accounts maintained in the Creditors' Ledger.

From the Purchases Book the total purchases for the month may be ascertained at the month-end, and a summary entry passed in the Journal, charging Purchases, Plant, Expense, or such other accounts as may be indicated by the columnar arrangement of the Purchases Book, and crediting Creditors' Controlling Account.

The following entry illustrates the principle:

SUNDRIES To CREDITORS' CONTROLLING ACCOUNT

For purchases, etc., for month of..........as under:

PURCHASES..

EXPENSE...

On the credit side of the Cash Book columns are provided for Net Cash, Discount, and Creditors, so that in case of a settlement of a claim for $200 under two per cent. discount, $196 is entered in the Net Cash column, $4 in the Discount column, and the $200, being the amount chargeable to the creditor in his account, is entered in the Creditors' column. The totals of these columns are available for a summary entry at the month-end, Creditors' Controlling Account being charged with the total charged

to the various creditors' accounts, as shown by the Creditors' column, and Cash Account and Discount Account being credited to balance, thus:

CREDITORS' CONTROLLING ACCOUNT To SUNDRIES
DISCOUNT..
CASH..

If settlements were made with creditors by giving them Bills Payable, and such Bills Payable were debited to the proper creditors' accounts in the Creditors' Ledger, and credited to Bills Payable Account in the General Ledger, by Journal entries, it would be necessary at the month-end to pass a summary Journal entry, debiting Creditors' Controlling Account and crediting Bills Payable (noting that the latter had already been posted), with the amount, posting only the former. If a Bills Payable book were maintained, the total credit on account of bills issued would be ascertained from this book, and would not have been posted during the month, as would be the case were the Journal method used. The entry would be:

CREDITORS' CONTROLLING ACCOUNT................
To BILLS PAYABLE...................................

The amount of Returned Purchases would be debited, by a summary Journal entry, to Creditors' Controlling Account, and Purchases would be credited, thus:

CREDITORS' CONTROLLING ACCOUNT................
To PURCHASES...

In short, the procedure in the case of creditors' accounts is the inverse of that adopted in the case of customers' accounts.

The procedure will be more easily understood, perhaps, by a study of the following illustration, which is drawn up to conform to the principles and practice set forth:

Dr. CREDITORS' CONTROLLING ACCOUNT. Cr.

1902				1902			
Jan.	31	To Cash & Discount (total for month).........	$11,500	Jan.	1	By Balance (total due to Creditors)..........	$10,800
"	31	To Bills Payable (total for month)............	800	"	31	By Purchases (total for month)...............	12,000
"	31	To Returned Purchases (total for month)......	250				
"	31	To Balance............	10,250				
			$22,800				$22,800
				Feb.	1	By Balance (total due Creditors)............	$10,250

The monthly entries may be made by postings direct to the Ledger accounts from the books of original entry, as is done by many bookkeepers, although there is more likelihood of errors, due to omissions, than in the case where the transactions are brought to an exact balance by Journal entries. It will also be found in many cases that a bookkeeper, who would be unable to understand and operate controlling accounts if it were necessary to pick up the entries in such a way, can carry out the procedure successfully if he is required to follow our *pro forma* entries, such as have been outlined.

In addition, the summary Journal entry is theoretically sound, because it restores to the Journal its function of a complete, although summary, record of the transactions. Practically, it is satisfactory to bring into the books a summary of the month's business that can be understood and grasped as a whole. It is not only useful to the accounting staff, but conveys a great deal of information to a proprietor first hand from the books, even without a technical knowledge on his part. It is found in many cases that this method of securing information appeals more to a proprietor than the inspection of prepared statements.

The Cash Book.

A thorough understanding of the Cash Book ruling that is necessary in the use of Controlling accounts, is essential at this juncture.

The ruling on the debit page of the Cash Book, beginning with the money column to the left and proceeding to the right, may be Net Cash, Discount, Customers, Creditors, Cash Sales, and General Ledger, thus:

Dr. CASH.

Date	Item	L. F.	Net Cash	Discount	Customers	Creditors	Cash Sales	General Ledger

The initial cash balance and all cash receipts are entered in the Net Cash column.

In case of the settlement of an account by a customer by payment of cash under discount, the amount of cash is entered in the Net Cash column, the amount of discount in the Discount column, and the sum of the

two, which is the amount to be credited to the customer, is entered in the Customers' column.

The Creditors' column is provided to take care of the possible receipt of cash from a creditor, which might come about by the return of goods, or otherwise, and while the ruling should be provided, its use is comparatively infrequent. For the sake of simplicity no transactions of this kind were included in the illustrative Controlling Account before given. The procedure is to carry the amount of cash into the Net Cash column and extend the amount to the Creditors' column.

In the case of cash sales the amount is carried into the Net Cash column and extended to the Cash Sales column.

In the case of a cash receipt affecting a General Ledger account, as, for instance, the sale of Real Estate, the amount would be carried into the Net Cash column and extended to the General Ledger column.

The opening cash balance being carried to the General Ledger column, a proof of the accuracy of the distribution in the columns is effected by determining if the summation of the totals of the Net Cash and Discount columns equals the summation of the totals of the other columns.

Bearing in mind the various columns that have been indicated, the summary Journal entry covering the transactions, would be as follows:

SUNDRIES To SUNDRIES

For summary of cash receipts, for month of........as under:

CASH. For receipts (other than opening balance).......

DISCOUNT......................................

CUSTOMERS' CONTROLLING ACCOUNT........

CREDITORS' CONTROLLING ACCOUNT.........

SALES...

GENERAL LEDGER ACCOUNTS (posted in detail).

The initial cash balance would have to be deducted from the total of the Net Cash column and the total of the General Ledger column, in order to arrive at the figures for the foregoing entry.

It will of course be understood that the General Ledger items will be posted from time to time, and that in the summary entry at the end of the month they are included to complete the entry, but are ticked off as being already posted.

On the credit side of the Cash Book the ruling, beginning with the money column to the left and proceeding to the right, providing that only

one column is required for Expense disbursements, may be Net Cash, Discount, Creditors, Customers, Expense, and General Ledger, thus:

CASH. Cr.

Date	Item	L. F.	Net Cash	Discount	Creditors	Customers	Expense	General Ledger

The procedure is the inverse of the debit page, and the *pro forma* Journal entry to cover the credit side of the Cash Book, is as follows:

SUNDRIES To SUNDRIES

For summary of cash payments for month of......as under:

CREDITORS' CONTROLLING ACCOUNT.........
CUSTOMERS' CONTROLLING ACCOUNT........
EXPENSE..
GENERAL LEDGER ACCOUNTS (posted in detail).
CASH. For payments...........................
DISCOUNT..

The Customers' column is to take care of any possible payments of cash to customers through the return of merchandise, or otherwise.

The General Ledger total postings are included merely to complete the entry, the postings having been made from the Cash Book.

It will be noted that the difference between the Net Cash columns discloses the cash balance, or the overdraft, at any time, an essential of a satisfactory Cash Book.

The foregoing entries presuppose the keeping of a Ledger cash account, opened by the initial cash balance, and which, under the method shown, will disclose the cash receipts and payments by monthly summary entries.

The Advantages.

Assuming that there are but three ledgers in the books under consideration, General Ledger, Customers' Ledger, and Creditors' Ledger, it is evident that every element necessary to a Trial Balance is embraced within the General Ledger.

If the correct totals have been determined in the books of original entry, and correctly transferred to the Journal and posted to the Controlling accounts, and the balancing of the General Ledger effected thereby, the accuracy of the totals shown to be due from customers, and due to creditors, by the Controlling accounts, is fairly assured.

If the total amount due from customers, as shown by the schedule of accounts from the Customers' Ledger, does not agree with the Controlling Account balance, there is evidently an error in posting, abstracting balances, or in the preparation of the schedule. The same applies to the accounts in the Creditors' Ledger.

Therefore, the error, or errors, if there be more than one, are localized, or limited, to a known ledger or ledgers, and no time is lost in going over a large part of the work that is accurate. The localization of error is the great labor-saving principle of the Controlling Account.

It will be apparent that the person in charge of the accounts will have in his possession a key or check by which he may require subordinates to achieve a certain result.

Another advantage is that the General Ledger may be written up quickly, and statements, in rough, showing profit and loss and financial position, prepared, without waiting for the posting and balancing of the Customers' and Creditors' Ledgers. However, there is a chance of error in writing up the Controlling accounts, as for instance, wrong additions, or the placing of amounts in the wrong columns in the Cash Book, so that the work cannot be considered as proved until the subsidiary ledgers are in agreement with the Controlling Accounts.

Self-Balancing Ledgers.

If it is desired to make each ledger self-balancing, that is, to embrace within itself the elements necessary to a complete balance, it will be necessary to open in each subsidiary ledger a General Ledger Controlling Account, which will be a summary account in inverse form to the Controlling Account of the subsidiary ledger in the General Ledger.

Thus, in the Customers' Ledger, the General Ledger Controlling Account would be **credited** with the total sales, debited with cash payments and discounts, and debited with returned sales and bills receivable.

Likewise, in the Creditors' Ledger a General Ledger Controlling Account would be established, **charging** it with the total purchases, and crediting it with cash payments, discounts, bills payable, and returned purchases.

This arrangement, carried out in the subsidiary ledgers, will provide the elements in each that are essential to a trial balance. This is some-

times desirable as a source of satisfaction to the ledger clerk, although, inasmuch as the chief bookkeeper has in the General Ledger a controlling account that supplies all the facts that would be contained in the controlling account in the subsidiary ledger, all of the advantages are secured, even if each subsidiary ledger is not made self-balancing.

In the case of the division of the General Ledger into Private Ledger and General Office Ledger, it is sometimes desirable to have in the General Ledger a Private Ledger Controlling Account, the mere balance of which will mean but little to the clerk in charge, but which will enable him to test the accuracy of the ledger by taking a trial balance, as will be explained later.

Private Ledger.

The **Private Ledger,** as has been pointed out, is a ledger in which are kept the accounts necessary to determine the financial position and earning capacity of an enterprise, and it is usually kept by someone in the confidence of the management in order that such information may not become the common knowledge of the office employees. A **Private Journal** is preferably used with the Private Ledger and is kept by the same person.

The accounts will include, as the book is often kept, the assets of the business, with the exception of accounts receivable and cash, and the liabilities of the business, with the exception of accounts payable. The items that are excepted are taken into the Private Ledger by means of a controlling account that measures the difference between such assets and liabilities. This difference is usually a debit, measuring the excess in amount of the cash and accounts receivable over the accounts payable. By means of this controlling account, in conjunction with the other assets and liabilities, the correct capital of the undertaking is shown in the Private Ledger.

The Private Ledger is opened by an entry in the Private Journal debiting in specific asset accounts the items of assets that would appear in the Private Ledger, such as Real Estate, Machinery, etc., and crediting in specific liability accounts the liabilities other than accounts Payable, for example, Mortgage Bonds Payable. In addition, the net debit or credit excess by reason of the difference between cash and accounts receivable on the one hand, and accounts payable, on the other, is carried into the entry. Thus, the entry necessary to open the Private Ledger might be as follows:

SUNDRIES To SUNDRIES

For assets and liabilities of Doe & Roe as at January 1, 1902, as under:

REAL ESTATE..............................

MACHINERY..............................

BILLS RECEIVABLE..............................

INVENTORY OF MERCHANDISE...............

GENERAL LEDGER CONTROLLING ACCOUNT.

MORTGAGE BONDS PAYABLE.............

CAPITAL ACCOUNT.......................

The General Ledger Controlling Account balance in the above is the difference between the assets and liabilities carried into the General Ledger, as under:

Accounts Receivable........................	$
Cash..................................	
Total..................................	$
Less:	
Accounts Payable........................	
Balance, as shown by Controlling Account above..............................	$

In the General office books, an entry is passed in the Journal debiting the Accounts Receivable and Cash, and Crediting Accounts Payable and Private Ledger Controlling Account, thus:

SUNDRIES To SUNDRIES

For assets and liabilities carried in Private Ledger by Controlling Account, as under:

ACCOUNTS RECEIVABLE (in detail).............

CASH..

ACCOUNTS PAYABLE.......................

PRIVATE LEDGER CONTROLLING ACCOUNT

The General Ledger being opened on the above basis, the balance of the Private Ledger Controlling Account in the General Ledger will equal the balance of the General Ledger Controlling Account in the Private Ledger, and the two ledgers are thus articulated by the controlling account expedient. It will be observed that there is a ledger account maintained for each asset and liability, although each ledger contains but a part of such accounts.

If the business is large enough to justify it, a subsidiary ledger is opened for Accounts Receivable, and a subsidiary ledger for Accounts Payable, a controlling account being opened for each in the General Ledger along the lines that have heretofore been set forth.

It will aid in a clear understanding of the plan of the ledgers if the Private Ledger is considered as the real ledger, embracing in detail or summary form all of the accounts and controlling the General Ledger, which, in turn, controls subsidiary ledgers containing the accounts of customers and creditors.

In case of the installation of this method in a going business, the General Ledger previously used should be closed completely, and entirely new ledgers opened, in order that there will be no trace of the accounts that are to be treated as private.

Transactions During Accounting Period.

Transactions may take place during the accounting period, after the installation of the Private Ledger, that affect accounts in both the General Ledger and the Private Ledger. For example, real estate may be sold for cash, the treatment of which illustrates the procedure. This would be recorded in the general books by an entry debiting Cash, and crediting Private Ledger Controlling Account, and in the private books by an entry debiting General Ledger Controlling Account and crediting Real Estate. Entries of this nature would be comparatively rare, and could be taken into the private books by entries in the Private Journal at the end of each month.

As purchases are made, they are recorded in the usual way in the general office books, an account being opened in the General Ledger and charged with their amount. Sales are also handled in the General Ledger, an account being opened and credited with the amount thereof. In case a Merchandise account is used the charges for purchases and credits for sales will be made to it instead of to the separate Purchase and Sales accounts.

Nominal accounts are raised in the General Ledger to record the various classifications of expense, such as Wages, Salaries, Rent and Expense, and to record any item of profit that may be secured, and, under ordinary circumstances, the Private Ledger would not be affected thereby during the accounting period.

Entries at Time of Closing Books.

The first procedure at the time of closing the books is to have a trial balance of the General Ledger taken. The nominal accounts appearing

thereon are closed into the Private Ledger Controlling Account, preferably by a Journal entry. Thus, the amounts standing to the debit of such accounts as Purchases, Wages, Salaries, Rent and Expense, are charged to the Private Ledger Controlling Account, and the accounts are credited to balance. The accounts with credit balances measuring nominal elements, including sales, are closed by debit entries and their amount credited to the Private Ledger Controlling Account. This will bring the General Ledger to its original position, as far as classes of accounts are concerned, disclosing Accounts Receivable and Cash, on the one hand, and Accounts Payable on the other, the Private Ledger Controlling Account establishing the equilibrium. A Trial Balance should then be taken to prove the accuracy of the work.

The Trial Balance taken before the transfer of the nominal balances, and the one taken afterward, are supplied to the person in charge of the private books. The inventory of stock is ascertained, preferably by some one other than the clerk in charge of the General Ledger, if it is desirable to withhold from him the result as to profit and loss. Any other information necessary to the determination of profit and loss is obtained, and the closing of the books is carried out in the private books.

At this juncture it should be recalled that the Private Ledger contains all of the assets and liabilities in specific accounts, with the exception of the assets and liabilities carried in the General Ledger. It contains the net effect of the latter in a controlling account that, at the beginning of the accounting period, represented the true position. So far as entries concerning accounts carried in both ledgers are concerned, their effect has been carried in from month to month. But the effect of the nominal account in increasing and decreasing assets and liabilities in the General Ledger will not have been carried into the Private Ledger. Thus, if Sales amounted to $100,000, and Purchases and Expenses to $95,000, the effect upon the net asset value recorded in the General Ledger would be an increase of $5,000. It is, therefore, necessary at the end of the accounting period as a preliminary to the closing entries, to bring the nominal accounts into the Private Ledger, setting them up in ordinary ledger accounts, and to carry their difference, or net effect, to the General Ledger Controlling Account. This is accomplished, preferably, by an entry in the Private Journal, thus:

SUNDRIES To SUNDRIES

For the raising of nominal accounts and adjustment of General Ledger Controlling Account, as under:

PURCHASES..............................

WAGES..................................

SALARIES...............................

RENT...................................

EXPENSE................................

GENERAL LEDGER CONTROLLING ACCOUNT.

SALES..................................

DISCOUNT...............................

From this point, the Private Ledger having been brought to an agreement with the General Ledger, and containing all of the nominal elements for the accounting period, the procedure is the same as in closing a set of books under ordinary conditions. The entries are passed through the Private Journal. A Trading Account is raised, to which the opening inventory, and the purchases, are charged, the latter being credited to balance. The sales and closing inventory are credited to the Trading Account, the Sales Account being debited to balance it, and the new inventory being set up by a charge to Inventory. The balance, measuring ordinarily a gross profit, is transferred to the Profit & Loss Account, and the Trading Account is closed. The nominal elements appearing in the nominal account are then closed into the Profit & Loss Account, the amount of the expenses being charged and the amount of the profits being credited thereto, the nominal accounts being closed. The balance of the Profit & Loss Account, measuring the net profit or net loss for the period, is carried to the withdrawal accounts, if any, and the balances of the latter are carried to Capital, and measure the net increment or decrement of capital.

The Private Ledger, at this stage, will, as in the beginning, disclose all of the assets and liabilities, and the capital, of the enterprise, although the net asset value recorded in the General Ledger will appear only by the balance of the General Ledger Controlling Account.

If the foregoing method is carried out, the object of the Private Ledger will be fulfilled. Even the bookkeeper in charge of the General Ledger, if the opening and closing inventories are withheld from him, cannot determine the outcome as to profit and loss. The bookkeeper in charge of the General Ledger, however, is usually more or less in the confidence of the management and, in fact, often has charge of both the General Ledger and the Private Ledger. Where this is true, the object of keeping the

Private Ledger is that the clerks other than the bookkeeper in charge of the General Ledger, who may have occasion or opportunity to consult the General Ledger, may not ascertain the confidential matters.

There are many variations of the method given. In case the confidential clerk has charge of both the General Ledger and the Private Ledger, the desired results may be obtained by keeping a Private Ledger with only such accounts as would readily disclose confidential information, such as the Capital, Profit & Loss and Withdrawal accounts. From the principles and full procedure given any of the other methods may be worked out, and, in fact, are but variations thereof, more or less complete, as the particular case requires.

THEORY AND PRACTICE OF ACCOUNTS.

APPLIED ECONOMICS AND ORGANIZATION.

By HOMER ST. CLAIR PACE, C. P. A. (N. Y.)

LECTURE X.

ARITHMETICAL EXPEDIENTS.

PACE & PACE

PACE STANDARDIZED COURSES IN ACCOUNTANCY, BUSINESS ADMINISTRATION, AND ENGLISH, IN RESIDENCE AND BY EXTENSION

30 CHURCH STREET, NEW YORK CITY

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LECTURE X.

ARITHMETICAL EXPEDIENTS.

Average Due Date.

It is often necessary, in the case of amounts falling due at various dates, to determine a date at which settlement can be made of the total, without prejudice, in the matter of the use of money, to the respective parties. Such a date is known as the **average due date,** or **equated time of payment.**

The common interest procedure, which does not give in itself the equated time of payment, is the calculation of interest upon each item at the agreed rate to some common date.

Thus, A advances to B the sum of $4,000, on dates and in amounts as under:

1902	
June 1	$1,000
June 15	2,000
June 30	1,000
Total	$4,000

It might be desirable on the succeeding 15th day of July to determine the amount then due A, allowing 6 per cent. interest upon his advances. The calculation may be made as follows:

Date	Amount		Time in days to July 15th		Amount on which to calculate interest for one day
1902					
June 1	$1,000	×	44	=	$44,000
June 15	2,000	×	30	=	60,000
June 30	1,000	×	15	=	15,000
	$4,000				$119,000

The total, 119,000, represents an amount of dollars upon which interest should be figured for one day. Pointing off two places gives the interest at the agreed rate, 6 per cent., for 60 days, $1,190. Dividing 1,190 by 60 (cutting off the cipher in each case and dividing by 6) gives a result of $19.83. Adding the $19.83 to the $4,000 advanced, gives $4,019.83, the total due A on July 15th.

It might, however, be desirable for B to give A a note for the sum of the advances, $4,000, with interest at the agreed rate, dated upon the **average due date,** in order to give the correct interest return to A.

For the purpose of determining such a date, reference should be made to the table before given, in which the proposition is reduced to the calculation of interest for one day upon $119,000. This proposition may be stated inversely; viz., that one day's interest upon $119,000 is the same as interest upon $1.00 for 119,000 days. In order to give effect to the varying amounts and the time that each has to run, interest may be calculated upon $1.00 for 119,000 days. If $1.00 would run 119,000 days, $4,000 would run for as many days as 4,000 is contained in 119,000. The quotient is 29¾, or, say, 30, the number of days for which the interest runs on the whole amount of $4,000 **previous** to July 15th, or from June 15th, the average due date.

To prove the average due date, interest upon $4,000 for 30 days at 6 per cent. is $20.00, or, to be exact, using 29¾ days, $19.83, the same as was determined by the calculations upon the separate amounts.

Aside from the calculations and their proof that have been given, the equated date of payment is obviously June 15th, inasmuch as the first and the last amounts are the same, and are equally distant in time from the intervening amount. Charging interest upon the first advance, $1,000, for the month, would obviously produce the same result as charging interest upon the sum of the first and last advances, $2,000, for the half month beginning with June 15th.

In practice, it is necessary, owing to the more complicated conditions likely to exist, to determine, as shown, the required date by an arithmetical process that will give due weight to the various amounts that enter into the total, and to the time that each amount has to run. It is always necessary to select arbitrarily a date to which, or from which, the time in days is calculated in respect to each item. The variations will give the weight as to the time that each has to run; and the weight as to amounts is obtained by multiplying the number of days in each case by the amount of each item.

It is found convenient to select as a basic date one of the dates in the series, to save a calculation, preferably the first or the last of the dates

given. If the proposition is worked on this basis, and if June 1st is selected, the results are as follows:

Date	Amount		Days from June 1st		Products
1902					
June 1	$1,000	×	0	=	0
June 15	2,000	×	14	=	28,000
June 30	1,000	×	29	=	29,000
	$4,000				57,000

Dividing 57,000 by 4,000 gives a quotient of approximately 14. In this case, if a prior date is selected, the number must be **added** to the basic date, instead of **subtracted.** If 14 days are added to June 1st, the same result as before, June 15th, is obtained.

Another and more complicated example will be given, the dates and amounts being as under:

1902	
Sept. 9	$650
Oct. 6	500
Oct. 9	250
Nov. 1	300
Total	$1,700

Required, average due date.

The last date is used as the basic date, to show the procedure when the last date is selected; and the days and products are:

Date	Amount		Days to November 1st		Products
1902					
Sept. 9	$650	×	53	=	34,450
Oct. 6	500	×	26	=	13,000
Oct. 9	250	×	23	=	5,750
Nov. 1	300	×	0	=	0
	$1,700				53,200

If 53,200 is divided by 1,700, the result is approximately 31, and 31 days **previous** to November 1st, the basic date, would be October 1st, the average due date.

This result may be proved by calculating interest to any desired date, upon the various items for the time each item has to run, and upon the entire amount from the average due date. For the proof, interest will be calculated at 6 per cent., to November 1st, upon each item, thus:

$650	53 days	@	6%	=	$5.74
500	26 days	@	6%	=	2.17
250	23 days	@	6%	=	.96
300	0 days	@	6%	=	0
$1,700					$8.87
$1,700	31⅓ days (adding ⅓ necessary to give absolute check)				$8.87

If one of the dates other than the first or the last date is chosen, the difference between the products previous to the date, and subsequent to the date chosen, must be used as the dividend, and the days calculated toward the greater weight of products.

Thus, in the calculation, if the third date, October 9th, had been chosen as the basic date, the results would have been as under:

$650	×	30	=	19,500
500	×	3	=	1,500
250	×	0	=	0
		Total		21,000
300	×	23	=	6,900
$1,700				14,100

If the difference of the products is divided—14,100 by 1,700—the result is approximately 8. As the greater weight of products is previous to that date, it is necessary to count backward eight days from October 9th to find the average due date, which, as before, is found to be October 1st.

Illustrations have now been given in which a first, a last, and an intervening date, and a date entirely outside of the dates of the money items, have been used as a basis; and the average due date obtained has been proved in each case by interest calculations.

There are other methods based upon interest calculations, of calculating the equated time of payment, but the method given is sufficiently brief, and is easily understood and applied.

A method that is found convenient when the account extends over a long period, and when months intervene between the items, is based upon calculations of interest at the rate of one per cent. per month. This rate is selected because of the convenience in calculation—any other rate would give the same mathematical result. The interest on each amount is calculated from a convenient date, say the first of the month in which the first amount appears, to the date of the respective item,

at the rate of one per cent. per month. The total of such interest is then found. The items of principal are then totaled, and one per cent., or a month's interest, is determined by pointing off two places. Dividing this amount by 30 gives the interest on the total amount for one day. If the amount arrived at from interest calculations be divided by the amount that represents the interest on the total of principal for one day, the quotient will be a number that will indicate the number of days between the basic date and the due date. Applying this principle to the foregoing example, the following result is obtained:

Date	Amount	Time from September 1	Interest
Sept. 9	$650	8 days	$1.73
Oct. 6	500	1 month 5 days	5.83
Oct. 9	250	1 month 8 days	3.17
Nov. 1	300	2 months 1 day	6.10
	$1,700		$16.83

Placing the point in the 1,700 gives a result of $17.00, interest for one month at one per cent. on the total amount. Dividing this amount by 30, the number of days in the month, gives approximately .57, the amount of interest on the total amount of principal for one day. Dividing the interest as above, $16.83, by the foregoing quotient, .57, gives a quotient of 30. Calculating 30 from the basic date selected, September 1, gives the average due date as October 1, the same as was obtained by the other method.

Averaging Accounts.

In a previous Lecture, an Account Current was given which is reproduced here in running form, as under:

HENRY SMITH

IN ACCOUNT WITH

July, 1902. CARLING & CO., Factors.

Dr.

Date	Item	Amount	Time (days)	Interest 6%
1902				
July 23	To Cash	$2,000.00	8	$2.67
July 30	To Cash	1,000.00	1	.17
July 31	To Interest, 6%, contra	0	..	14.41
July 31	*To Balance down*	*1,814.41*	..	0
		$4,814.41	..	$17.25

Cr.

Date		Item	Amount	Time (days)	Interest 6%
1902					
July	1	By Account Sales..............	$1,000.00	30	$5.00
July	10	By Account Sales..............	2,500.00	21	8.75
July	13	By Account Sales..............	500.00	18	1.50
July	16	By Account Sales..............	800.00	15	2.00
July	31	By Interest, *net credit contra*.....	14.41	..	0
			$4,814.41	..	$17.25
1902					
Aug.	1	By Balance....................	$1,814.41		

Assuming that the amounts to the credit of Henry Smith were payable at the dates named, and that the debits were proper offsets at their respective date, the date is required at which it would be equitable for Carling & Co. to date their note, bearing interest, in settlement of the balance of the principal of the account, $1,800, instead of reaching a settlement on the basis of the Account Current.

It is necessary to determine the products of the sides from or to a common date, the same as if the average due date of each side were being determined. If we proceed in this way to the last date named, July 30, the results are:

Credits:					
$1,000	×	29	=	29,000	
2,500	×	20	=	50,000	
500	×	17	=	8,500	
800	×	14	=	11,200	98,700
Debits:					
$2,000	×	7	=	14,000	
1,000	×	0	=	0	14,000
Excess of credits...............................					84,700

Dividing the excess of products, 84,700 by the balance of the account, 1,800, gives, as a result, 47. That is, analyzing the process, Henry Smith is entitled to the use of $1.00 for 98,700 days; and, as an offset, Carling & Co. is entitled to the use of $1.00 for 14,000 days, the excess in favor of Henry Smith being the use of $1.00 for 84,700 days. Inasmuch as $1,800 is due Henry Smith on account, he will be entitled to the use of $1,800

for as many days as 1,800 is contained in 84,700, or 47. The time must be calculated backward, so that it may be determined that 47 days previous to July 30 is June 13 the date from which interest must be computed on $1,800.

In the Account Current, interest is calculated to July 31; so, in computing interest as a check upon the accuracy of the due date, one day must be added to the 47 days, making 48 days. The calculation of interest at 6 per cent. upon $1,800 from June 13th to July 31st, 48 days, is made by pointing off two places to obtain interest for 60 days, $18, and by taking away one-fifth, for the 12 days by which 60 exceeds the actual 48 days, $3.60, leaving $14.40. This result is within one cent of the amount achieved in the Account Current by figuring the interest on the debit and credit items, and by deducting the interest upon debit items from the interest upon credit items.

Other dates may be selected as a basis, but the method given, has, perhaps, the fewest complications.

An understanding of the reason for the processes is much more essential than memorizing a formula. The latter is likely to be forgotten, but a knowledge of the principle will remain and may be of use in a situation that the process does not cover.

Determination of Time in Calculating Interest.

A detailed consideration of the methods of calculating interest is not within the scope of this Lecture. It is thought desirable, however, to consider several phases of the subject, particularly in relation to the computation of time.

The ordinary commercial method of calculating time is to assume that there are 360 days in a year, that may be divided into 12 parts of 30 days each, corresponding, although not exactly, to the 12 calendar months of the year. The exact days are counted, and, for example, may be found to be 75. If 75 is divided by 30, a result of $2\frac{1}{2}$ is obtained. Thus the interest must be calculated for two months and 15 days. For this time $2\frac{1}{2}$ twelfths, or 5-24, of the yearly rate must be taken.

This method answers well enough for short-time periods, although carried to its logical conclusion, by counting all the days for a year 365, and by dividing by 30, a result of $12\frac{1}{6}$ is obtained, so that in a year the inaccuracy amounts to $\frac{1}{6}$ of a month, or five days. That is, 365-360 of the rate is charged, amounting to an excess of 5-360, or 1-72.

It has been held that such excess, growing out of the method of calculating interest, when it brings the actual interest collected above the legal rate, does not constitute usury.

In case an amount is payable in a month, the due date falls on the same date of the succeeding month, irrespective of the number of days elapsed. A note dated on January 31, payable in a month, would fall due on the last day of February. The calendar months are recognized in this way. In fact, it is not at all uncommon for interest to be calculated upon the basis of calendar months, each to take 1-12 of the rate; and the remaining days are taken as their fractional part of a 360-day year. Thus, interest is to be calculated from June 10th to September 15th. The time from June 10th to September 10th is taken as three months, and for the time from September 10th to the 15th, there must be added 5 days, making the total time 3 months and 5 days. Had the first method been followed, the result would have been:

Days in June	20
Days in July	31
Days in August	31
Days in September	15
Total	97

Dividing the 97 by 30 would give 3 months, 7 days, a difference of 2 days.

The two methods may thus work different results, depending upon the variations in the number of days in the calendar months. For long periods of time, approaching a full year, the last method gives more nearly the correct result. The discrepancies in each method, from the commercial viewpoint, are compensated by the ease of calculation obtained in the 360-day method.

The time in obtaining exact interest is determined by taking the actual number of days, and by calculating the same proportion of the rate as the number of days bears to the 365 days of the year. Thus, in the case of interest running for 75 days, 75-365 of the rate, instead of 75-360, would be used. Thus the error of 1-72, as pointed out in the 360-day method could be avoided. This method, used by the Government, is known as the 365-day method, and is rarely used in business.

In either method, in determining the number of days between two dates, one is **included** and one is **excluded.** In New York, the date **from which** the time runs is excluded, and gives the effect of the exclusion of one day. Thus, in the case of a loan running **from** June 15th and payable July 10th, the count could be made conveniently by deducting 15 from 30, the number of days in June, which leaves 15. Deducting, in a month, one number from another, includes one of the numbers and excludes the other. To the 15 must be added the total number in July,

10, because the exclusion has been made in June. Thus 25 is given as the number of days for which interest should be calculated.

Custom usually determines the method. It is incumbent upon the accountant to know the various methods of computing time, and the effect of each, although it is not often his province to insist upon a change in method that will produce a more nearly correct result when such a change is opposed to accepted commercial usage.

Sixty-Day Method.

There are many methods of calculating interest in use. One of the best for ordinary purposes is the 60-day method, which has been used in illustrative calculations. It proceeds upon the basis of the 360-day year and the six per cent. rate; that is, one-sixth of the rate, or 1 per cent., is applicable to one-sixth of the time, 60 days, or two months. Inasmuch as 1 per cent. may be found by pointing off two places in the principal sum, the interest on the amount in question for 60 days at 6 per cent. is obtained by placing a point. If the days are greater or less, an amount in proportion is respectively added or subtracted. The sum is then reduced to the actual rate should it vary from 6 per cent.; that is, if the rate is 5 per cent., one-sixth of the amount is deducted.

THEORY AND PRACTICE OF AUDITING.

BY HOMER ST. CLAIR PACE, C. P. A. (N. Y.)

LECTURE I.

PRINCIPLES AND DEFINITIONS.

Theory and Practice of Auditing.

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LECTURE I.

PRINCIPLES AND DEFINITIONS.

In General.

Accounting, in a broad sense, is the recording of facts as to the acquisition and disposition of values, and as to the incurrence and discharge of liability for values. In respect to the particular undertaking, the excess of the values possessed over values owed, at any moment of time, is the investment or accounting capital of the enterprise, and the financial position is displayed by setting forth the values possessed, or assets, in opposition to the values owed, or liabilities, in conjunction with the accounting capital. It is evident that the facts displayed in opposition will produce an equilibrium, which provides the necessary prerequisite to the future record of increases and decreases of value by the bookkeeping device known as double entry. It is essential to a satisfactory accounting record that this initial financial position be established.

The subsequent record must disclose, in chronological form, the increase and decrease of assets and liabilities, classified in such a way as will be most convenient and informative in respect to the specific enterprise.

In order to determine the increase or decrease of the accounting capital invested, it is necessary to determine, after the lapse of any desired period of time, the value of assets and amount of liability, the excess of the former being the capital.

While the comparison of a known opening financial position with a known subsequent financial position will disclose the net difference in the accounting capital of the undertaking, it does not, in any way, disclose the reasons for the net change, either in respect to particular values or in respect to the undertaking as a whole.

The chronological record, connecting the original position with a subsequent position, is necessary in order that the business transactions may be recorded in such a way as to show the reasons for the change in investment. Information is thus obtained for the purpose of augmenting results that have been beneficial, and for decreasing, or eliminating, results that have been detrimental.

The accounting record is effected, preferably, through double entry bookkeeping, which constitutes the means by which the accounting results are obtained. Double Entry bookkeeping is accepted as the standard means of expressing accounting results, because it meets the essential requirements of an adequate accounting record while the other devices do not. However, unscientific devices are often employed, and the double entry method may be so improperly handled as to achieve but a small part of the desired results.

The recorded initial financial position, the chronological record thereafter, whether properly kept or not, and the subsequent financial position, cover the range of the **accounting period.** From the record and facts must be gained the knowledge of the assets and liabilities, and the profits and losses, of the particular undertaking, for which the accounting record is inaugurated and maintained.

Errors in the Accounting Record.

In the making of an accounting record, there is always the possibility of errors. The errors may arise **unintentionally** through an imperfect knowledge of accounting and bookkeeping methods, and may consist of either of the following:

1. **Errors of principle,** affecting the statement of asset and liability elements or financial position, and the profit and loss or revenue transactions that lead to such statement of financial position. Thus, if the replacement of a capital asset, that is, one acquired for the permanent use of the enterprise, when worn out, is made out of funds contributed as capital, and not out of funds secured through the use of capital assets, an error of principle is committed, misstating the revenue-producing or profit capacity of the undertaking.

The errors may be of **omission,** not appearing in the record, as well as those of **commission.** Thus, if an expense and resulting liability are omitted, the profit increment will be overstated.

2. **Errors of technique,** affecting the bookkeeping accuracy, such as a wrong posting or error in addition. Errors of this class may not affect the statement of assets and liabilities, and profit and loss, as in the case of a nominal element being carried by mistake to a rent account instead

of to a salary account. However, should a nominal element be carried to an asset account, through an error in posting, it would be a technical bookkeeping error, although achieving, if undiscovered, the same result as an error in principle.

Errors of technique, too, may be of omission, as where an inventory item and the liability therefor, are not raised in the books, on the theory that, inasmuch as the entry does not change the net results, it need not be recorded.

As distinguished from **unintentional** errors, there may be **intentional** errors, made:

1. For the purpose of misstating the financial position, or revenue-producing capacity, of the undertaking;

2. For the purpose of covering direct peculation or fraud on the part of the one entrusted with making the accounting record.

In the first instance, the proprietor may cause the error to be made for the purpose of securing loans or credit, or to secure unduly favorable terms upon sale. The second class covers fraud and embezzlements, ordinarily carried out by the purloining of cash and the falsification of records to cover the theft.

The Necessity for Verification of the Accounting Record.

The simplest state of affairs that can be imagined in respect to the keeping of an accounting record, is the case of the person who personally knows every detail of the business involved, and who personally makes the accounting record. In such a case, the business would be so small that the owner could check the accounting record with his personal knowledge to such an extent that the errors would be trivial, except possible intentional errors on the part of the owner.

The next step in the development of a complex organization is a small business in which the proprietor has so few assistants, and devotes so much of his personal attention to the transactions, that he knows from time to time, the amount of property he owns, and the financial obligations to which he is subject, and what the approximate outcome should be in relation to the profit and loss of the undertaking.

In a larger business, and increasing with the magnitude of transactions involved, the proprietor is dependent to a greater extent upon his employees, and especially upon the employees who maintain the accounting record, to determine from time to time his financial position and the results of the business transactions.

The greater the size of the business, the greater his dependence must be, and the more difficult it is to devise and verify an accounting system

by means of which those entrusted with large operations can keep in touch with the multitude of details which, in the aggregate, produce, or fail to produce, the results for which the undertaking is operated.

The office manager, or bookkeeper, who maintains the accounting record, no matter what the size of the undertaking may be, is obviously not competent to certify to his employer as to the absence of errors of principle and technique, for it may be assumed that the bookkeeper, granting his honesty, will keep the accounting records as well as his knowledge and experience permit. Even to a greater extent, the bookkeeper or office manager is not competent to testify to the absence of fraud, for, being an interested party, his evidence might be influenced by self-interest.

However well the business man may be satisfied as to the adequacy of his accounting record, and the integrity and competency of the person in charge thereof, when, for the purpose of obtaining credit, he finds it necessary to submit financial or earning statements to his bankers or others, he labors under the same disadvantages in presenting the facts to such persons as does his own bookkeeper in presenting the facts to him. That is to say, the banker looks upon him as an interested party, apt to be prejudiced, and, other things being equal, places less faith in his statement than he would in a statement vouched for by one who is not directly interested.

Auditing.

Auditing is the verification of accounting records. The necessity for auditing arises from the liability of error, either intentional or unintentional, and either of commission or omission, and the business necessity of an independent determination of an accurate accounting record, both as to possession of values and liability for values, and as to revenue-producing capacity.

Auditing, when properly performed by competent and disinterested professional auditors, guards against waste and incompetency of management, and against the evils that come to employer and employee through improper supervision of those entrusted with the handling of money. It provides the avenue for publicity, and is the means by which the investor may be assured of the integrity of his investment, and the competency of the men who are entrusted with the management thereof.

Various though the manifestations of Auditing may be, whether an investigation covering special matters, or a detailed examination of the record of the financial transactions of an undertaking, it amounts, in the end, to the verification of accounting records.

The Scope of Verification.

There are different kinds of audits, depending upon the nature of the verification that is required. The ideal audit is one that covers a complete verification of the accounting record from a prior authenticated financial position, up to the latest financial position, involving a consideration of the business with a view not only of verifying the record that has been made, but of safeguarding against the omission of transactions that are vital to proper statements.

Thus, if an undertaking was originated on the first day of January, 1900, and its possession of values and liability for values, absolutely known and set forth at that date, an ideal audit would involve a tracing of the increases and decreases of assets and liabilities, resulting in a certain condition of assets and liabilities as at the end of the period which is being audited, say at December 31st, 1900. Such a verification reconciles, by the chronological record, the financial position of the undertaking as at the beginning and closing of the year 1900.

If, at December 31st, 1901, a complete detailed audit for that year were desired, the position being verified to December 31st, 1900, it would, of course, ordinarily be unnecessary to verify the work prior to such authenticated statement of assets and liabilities. Conditions may exist, however, that would render necessary a verification prior to the former financial statements.

Therefore, it will be seen that the ideal and full detailed audit consists in the verification of an accounting record, from some authenticated prior position, whether at the beginning of the business, or at the beginning of some accounting period, down to the subsequent date at which it is desired to set forth the accurate financial position of the undertaking.

The foregoing is known as a **detailed audit,** although a detailed audit may be made, and in fact generally is, without a checking of the complete accounting record, as will appear later.

A **completed audit** is one in which the verification is made for a certain period after the accounting record is complete, and it is made, so far as is possible, with the accounting records in possession of the accountant. The advantage of a completed audit is that, the entire record having been made, there is little chance of alterations in the books, particularly so when they are in the custody of the accountant.

A **continuous audit** is one in which the work is performed from month to month during the accounting period. The advantage of the continuous audit, as compared with the completed audit, is that errors, either of principle or technique, are detected sooner than if the audit were made

after the end of the accounting period. In addition, the bookkeepers, not knowing the exact date when the audit will be made, are under the necessity of keeping their work well caught up. The disadvantage of the continuous audit is that there is a chance of alterations in the work, after it has been audited. Such alterations may cover fraud or affect the position at the end of the year, and are difficult to detect without re-auditing.

A **balance sheet audit,** as distinguished from a detailed audit, is one in which the verification is made only to the extent necessary to certify that the correct financial position of an undertaking is set forth in its Balance Sheet.

The amount and kind of work necessary for the accountant to perform, in order to certify to the correctness of a Balance Sheet, is a matter of some dispute, although unquestionably it should be determined that the undertaking possesses assets at least to the amount stated in the Balance Sheet, valued in accordance with accepted accounting principles, and that the liabilities are not in excess of the amount stated.

It is sometimes contended that the work consists merely in certifying that the Balance Sheet is prepared in accordance with the books of account. This means nothing more than a transcript of book balances, correct or incorrect, as may happen to be the case, and permits of the use of the accountant's name, without extending to him an opportunity to perform the work that would render his certificate of value.

If, in an exceptional case, it should seem to be advisable for an accountant to make such a certificate, he should state plainly therein that he is certifying to nothing further than that the Balance Sheet is in accordance with the books. Even this may lead to a misapprehension on the part of those who look upon the association of an accountant's name with a statement as, in a measure at least, vouching for its substantial accuracy. It is hard for the layman to make the distinction, and it is much the better plan for the accountant to avoid such certifications.

On the other hand, it is not considered necessary to make a detailed audit in order to make the certificate, although it is necessary to trace profit and loss transactions to a considerable extent, in order to see that proper provision has been made for probable losses upon realization of accounts receivable, for depreciation, etc.

It is not intended to give, at this point, more detail than is sufficient to fix, in a general way, the scope of the audit.

An **investigation** may relate to any particular phase of the accounting record, or it may relate to part or all of the transactions over several accounting periods, or over the entire life of the undertaking. It may

be to determine its earning capacity for the purpose of sale, or the admission of a partner; it may be a report upon the property and revenue-producing capacity of a corporation, in order to facilitate a sale of its bonds; it may be small in scope, but intensive as to detail, or it may be wide in scope, with but small reference to detail.

Whatever the scope of an investigation may be, the accountant will, of course, safeguard himself by certifying only to the matters that he has actually investigated.

Forms of Reports.

The forms in which an accountant may set forth the results of his efforts at verification will vary from the mere certification of a Balance Sheet to a voluminous analytical report, and, within certain limits, may be made to reflect his ability to reduce to clear and concise language and statements the facts found to exist.

Theoretically, in the case of the certification of a Balance Sheet, it is prepared by the regular accounting staff and submitted to the accountant, who then verifies the items and certifies that it sets forth the true financial position of the concern. Practically, the accountant is more frequently called upon to prepare the Balance Sheet, as well as certify to it, and even though he is not, a recasting and revision are likely to be necessary.

If the Balance Sheet, as originally made or recast, is in form satisfactory to the accountant and his client, the accountant will give an **unqualified certificate.** A satisfactory form is as follows:

THIS CERTIFIES, That the above Balance Sheet of the John Doe Company is a true statement of its assets, liabilities and capital as at the close of business December 31, 1901.

RICHARD ROE,

Certified Public Accountant.

The form used in certifying to the Balance Sheet of the United States Steel Corporation, as published in its annual report, is as follows:

"We have audited the above Balance Sheet, and certify that in our opinion it is properly drawn up so as to show the true financial position of the United States Steel Corporation and Subsidiary Companies on December 31, 1906."

If the client insists upon a Balance Sheet that the accountant cannot conscientiously certify, or if his investigation has not been full enough to justify an unqualified certificate, resort may be had to a **qualified certificate** relieving the accountant from the responsibility of unqualifiedly

approving the statement. The qualified certificate may give the reasons for the qualification, or not, according to circumstances. The following is a form of qualified certificate:

THIS CERTIFIES, That the above Balance Sheet of the John Doe Company discloses its true financial condition as at the close of business December 31, 1902, subject to the qualifications contained in my report of February 3, 1903. RICHARD ROE,

Certified Public Accountant.

The certificate may be made to include the revenue accounts of the concern, if they have been verified, or each may be certified separately.

Instead of a certificate, the accountant may make a report, commenting upon the items of the statements, attaching the latter as exhibits to the report proper, and numbering or lettering them for identification. Thus, the Balance Sheet may be Exhibit A, the Trading and Profit and Loss Account Exhibit B, etc. This, in fact, is the usual form of report, and is capable of development sufficient for any report, whether of detailed or balance sheet audit, or of special investigation. It is customary, in addition to making such a report, to certify to a copy of the Balance Sheet so that it may be used for the purposes of the client.

It is best to adopt, as nearly as may be, a standard form of report, using the same stationery, cover and binding, as well as a regular style of presentation of subject matter of report and supporting schedules. It frequently happens that several reports are made to a client in the course of an investigation, and in such a case the inconsistencies of differing styles are most apparent. At this point, it is not intended to give more than the general principles that should govern in the matter of the preparation of reports.

The working papers that accumulate during an audit should be carefully made with pen and ink, on uniform paper. In handling numerous papers, a great economy of effort, and satisfaction in binding, are secured by the use of sheets as nearly the same size as possible. Analysis sheets should be provided with rulings sufficient for the construction of analytical statements. These papers are used as the basis of the report and should be arranged in order and filed carefully for future reference. The methods of preparing working papers vary with accountants, but hasty and careless work should not be permitted in any case.

A report should usually be made in triplicate or quadruplicate, so that the client may be supplied with the original, signed copy, and one or two additional copies if desired, leaving one copy to be preserved by the accountant in a fire-proof file.

The legal responsibility of the accountant for certifications and representations contained in reports is not well settled in this country. He is unquestionably morally responsible for reasonable professional care in making such certifications, and, if the courts follow English precedents, will be held legally responsible as well.

The accountant, in reporting upon any matter, should confine himself to a presentation of the facts, and not express opinions unless they are specifically asked for, and then only with the greatest caution. Facts may be so presented as to leave but one conclusion possible, but as a general rule, it is better to allow the person to whom the facts are presented to draw the conclusion.

Distinctions in Terms.

There is some confusion in the use of the terms **accountant, auditor, accounting, auditing,** and **accountancy.**

The term **accountant,** or **public accountant,** is properly applied to the person who, having the requisite theoretical training and experience, offers his service to the public in the installation of accounts and systems, and in the making of appraisals, audits and reports.

Under the Certified Public Accountant law of New York, the degree of **Certified Public Accountant** may be obtained by conforming to certain requirements, and other states have followed closely the New York legislation, thus officially establishing the use of the term **accountant.**

There is another use of the word accountant, describing a skilled bookkeeper engaged in private employment. To make a distinction, the word **public** is used in connection with the word **accountant,** giving the term **public accountant,** although with the growth of the profession, the single word **accountant** is coming to be accepted as descriptive of the professional accountant.

In England and Scotland there are statutory provisions requiring that corporations, and certain other classes of undertakings, must have their accounts audited and certified by **auditors,** so that the term **auditor** is properly used in designating the person who performs such work.

In this country the term **accountant** includes in its meaning the person who audits accounts. This is evidenced by the legislation providing for the degree of C. P. A., for the accountant will most frequently use his degree in certifying to facts determined through auditing work.

There is a common acceptation of the term **auditor** as meaning one in charge of an accounting department, generally of a large corporation, such as a railroad company, but whose duties are private, and who cannot

be called an auditor in the sense that a public accountant is sometimes called an auditor.

The terms **accounting** and **auditing** apply to different branches of the accountant's work, the former including the installation of accounts and systems, and the latter the making of audits and reports.

The term **accountancy** is applied to the profession of the public accountant. The term **accounting** is sometimes used in this sense, but it is preferably used in referring to that part of the professional work of Accountancy that deals with the theory and practice of accounts.

The name **controller** or **comptroller,** is often applied to the chief of the accounting staff of a large corporation, signifying, in many cases, a more responsible position than auditor. A controller is often charged with the responsibility of planning and executing financial plans. The term is used especially in the case of large corporations with subsidiary corporations, each of which may have its own auditor.

Verification.

The meaning of the term **verification,** as used throughout this Lecture, is that the facts be established to the knowledge of the accountant or his assistants. In the transaction of business the great majority of things must be accepted for what they appear to be on their face. In the matter of verification of financial records, however, it is the duty of the accountant to go back of appearances, proverbially deceptive, and determine the facts that actually exist. It therefore becomes his particular work to obtain and state facts and not to state opinions and impressions based upon appearances.

It is true that there will always be matters not capable of absolute verification, and other matters of not enough importance to warrant a detailed verification, depending upon the circumstances of the particular audit, but in certain well known essentials, to be stated later, the verification must be absolute.

The principle of this is stated in the well known auditing maxim, **take nothing for granted.** When personal comfort tempts to the acceptance of an item, the verification of which is essential, and which involves the tracing of a complicated transaction, the maxim must be heeded, for otherwise the very discrepancy that the audit is planned to guard against may go undetected.

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LECTURE II

PROCEDURES

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PACE STANDARDIZED COURSES IN ACCOUNTANCY, BUSINESS ADMINISTRATION, AND ENGLISH, IN RESIDENCE AND BY EXTENSION

30 CHURCH STREET NEW YORK CITY

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LECTURE II

PROCEDURES

The Initial Steps

In conducting an audit, the first essential is to obtain a correct idea of the accounting method employed, the name and uses of each of the books of account, and the names of the persons in charge of the various transactions, such as the receipt and payment of cash, the authorization of credits, the ordering of goods, etc. For this purpose, it is customary to require that a list of the books used, and of the names of the persons in authority, be furnished. The quickest way, however, to obtain such a list is for the accountant to prepare it himself.

It not infrequently happens that the scope of the audit covers time in which two or more different sets of books were operated, or old ledgers have been closed and new ones opened, in which case it is best to have the periods covered by the different sets, or particular books, noted on the list.

In the nature of things, the accountant is liable to be called in upon work the details of which are more or less unfamiliar to him, but, as a rule, it is inadvisable for him to devote considerable time merely to studying the conditions. It is much better to obtain the list of books, and without further ado begin on a portion of the work which in any event must be performed, and which will at the same time give the run of the business, and the uses of the books. This effects not alone an economy of time and effort, but produces a much better impression upon the client and employes than would otherwise be the case, an object worthy of some consideration, especially in new audits.

The best field for this initial work is in the cash transactions. A scrutiny of the Cash Book, both by verifying all its additions, and by checking the original entries against the postings in Ledger accounts, will quickly indicate the general course of the business.

Another method is to determine that the payments of cash, as recorded by credit entries in the Cash Book, have been actually made as recorded. This is accomplished by requiring the production of receipts for payments, called **vouchers,** noting the items for which direct receipts cannot be produced, and later verifying them, if possible, by other means. This is an essential part of the audit, and gives an immediate insight into the business.

The choice between these two initial steps will depend upon the circumstances attending the particular audit, and the availability of the men for the work. The verification of cash payments, and the checking of additions, can be done advantageously by an accountant working by himself, while the checking of postings can best be done by two men working together. The economical disposition of the auditing force largely determines the order of procedure, and it is a matter that can be worked out only with the conditions of the particular audit well in mind.

In the detection of unintentional errors the accountant has to contend with nothing more than incompetency, which, while it requires a thorough knowledge of the theory and practice of accounting and auditing, does not present the difficulties involved in the detection of intentional errors, or **fraud.**

The detection of errors of intent, or fraud, must be one of the objects of an audit, although the particular audit may not be especially instituted for that purpose. Therefore, the search for fraud must be unceasing, and as a preliminary measure, the duties of the members of the office staff must be studied in order to determine where fraud could most easily occur. In case the receipt and disbursement of cash is made by the same person, for example, the opportunity for fraud is greater than if the two functions are performed by different persons. Such a condition should be advised against.

Checking the Bookkeeping Record

A large part of the work of auditing consists in a minute scrutiny of the actual bookkeeping record in order to determine whether the ledger balances and statements accord with the facts recorded in the books of original entry, and whether alterations have been made for the purpose of covering fraud.

It is usually understood that the work of auditing begins only when the accounting record is completed, and the books are in balance as evidenced by a Trial Balance. In such a case the preparation of the Profit & Loss Statement and Balance Sheet may be made a part of the work,

although such statements may be prepared by the regular staff, in rough, and await the accountant's audit for criticism and final approval.

In a general way, considering the audit of books of account kept on the double entry principle, the accountant first determines whether the Balance Sheet, or in the place of the Balance Sheet, the Trial Balance, is in equilibrium. He then compares the Balance Sheet with the Ledgers from which it is made, checking the Ledger additions and the abstraction of balances, to see if it properly presents such Ledger facts, thus proving the equilibrium of the Ledger.

It is then necessary to establish the agreement of such Ledger balances with the original records of the business, or at least such original records as are likely to disclose errors of consequence. For this purpose the entries in the Ledger accounts are compared with the entries in books of original entry such as the Cash Book and Journal.

This comparison, most commonly called **checking,** and by British accountants called **ticking,** is generally made by two accountants, a **senior,** in charge of the audit, and a **junior,** who performs clerical work and acts as an assistant to the senior.

The senior may handle the Ledger, and, verifying a particular account, call back to the junior the detail of an entry. Thus, he may be working on the accounts of a customer and verifying the credits. Finding an item of $350 posted from the Cash Book on January second, he calls back the name of the account, date, Cash Book page and amount. This item the junior finds on the debit side of the Cash Book and repeats the amount. The senior thereupon **checks** the item in the Ledger accounts, and the junior checks the item in the Cash Book, the respective check marks indicating the comparison.

It is necessary to exercise caution in calling back amounts in order to avoid errors. The work is rather tiresome, but unless it is done carefully amounts to nothing. If an item of $350 is called back as **three-fifty** and the junior checks off a $3.50 item, the error might remain undetected so far as the calling back is concerned. Such an error is guarded against by stating in the case of cents the fact, thus—**three dollars fifty cents.**

It is customary for accountants to use a personal check mark in order to recognize at any future time the work which they have done, and this may consist of an initial with some little peculiarity not easily apparent, but which the accountant invariably makes in order more readily to recognize his personal check mark. It is well, in addition, to use some kind of ink which is not in common use, in order to render a duplication more difficult, and, of course, this ink should not be made available to the bookkeeper or other office employes.

If the senior finds that each entry in the Ledger account is duly posted from some book of original entry, his check marks will indicate that fact, but if any item cannot be traced to another book, it will be apparent through the absence of a check mark, and a notation is made to investigate the inconsistency.

There are always bound to be matters which come up in the audit of accounts that, for the moment, cannot be satisfactorily explained, but upon full investigation, are found to be capable of explanation. It behooves the accountant to be careful in talking in regard to such apparent discrepancies until he has completed his investigation, for it is awkward to explain his first misunderstanding.

In making notes, as the checking work progresses, of apparent discrepancies and matters to be more fully investigated, the accountant must exercise great care to make his notes carefully, and with sufficient detail to recall to his mind quickly the points involved. The making of inadequate notes, upon various sized slips and sheets of paper, and in a careless hand-writing, marks the inexperienced accountant. Failure to regard the necessity for care and neatness in this respect will bury the accountant with a mass of detail which will require for its proper use nearly as much work as its original preparation. The accountant makes speed by not having to perform the same work twice. This applies with even greater force to the preparation of statements, involving perhaps weeks of work, which must come out to an exact balance or reconciliation.

Instead of the calling being made from the Ledger back to the book of original entry, it is sometimes desirable that the book of original entry be called back to the Ledger. In the case of the Cash Book, this would enable the accountant to see that every entry had been posted into the Ledger, and while it would complete the Cash Book, it would not complete the checking work of the particular accounts. It ordinarily consumes more time than the opposite procedure, although there are cases where it is desirable to do the checking in this way, particularly when it is desirable to finish the verification of a book of original entry at one sitting, or while the record is in the possession of the accountant.

The accountant must maintain a continual watch for erasures, and satisfy himself, where possible, that they were not made to conceal fraud. When passing over such erasures, he should especially check them with his private mark in order to safeguard himself as much as possible against erasures made after he has completed his work. So far as the accountant is able to control the making of the bookkeeping record, he should prevent erasures, instructing that transfers be made instead, or the erasure made by drawing red-ink lines through the work, so that the reason for the

correction will be apparent. This is a hard matter to accomplish, for no bookkeeper likes to have errors made so apparent, and he will ordinarily resort to an erasure.

It is necessary to maintain a close watch for errors that result from carelessly made figures. As an example, ciphers and the figure 6 are often made very much alike, and errors in addition and posting may result therefrom. It is another illustration of the fact that the accountant must not be deceived by appearances, but go back of appearances and ascertain the facts.

Good light and sufficient room in which to work are essential to the detection of erasures, the determination of carelessly made figures, etc., and should be secured wherever possible. Privacy is desirable, when it can be obtained, in order that proper concentration may be had upon the work.

Checking the Cash Book

All entries in the Cash Book must be checked in the manner which has been indicated, establishing its agreement with the Ledger.

In calling back the Cash Book entries, all extraordinary items, especially those large in amount, for which the reason is not apparent on the face of the books, should be noted for special investigation. On the debit side of the Cash Book, the receipt of insurance money, contributions of capital, etc., are unusual items which may render necessary special consideration.

On the credit side of the Cash Book there may be extraordinary payments, not falling within the general run of the business, such as large purchases for the permanent plant of the business, extraordinary legal expenses, etc.

The necessary explanation of these credit items will, as a rule, be found in the supporting vouchers when they are examined, and in case they do not supply the necessary explanation, the accountant must seek it elsewhere. In passing through the Cash Book, however, it is well to note these unusual items for further and particular investigation.

In addition, a careful scrutiny must be made of all erasures, and notations made of the matters which require further explanation, and which might conceal errors or fraud.

Petty Cash

In nearly all cases it will be found that small payments, such as carfare, express charges, stamps, etc., are made from a cash fund in charge of the cashier or other person entrusted with that work. The amounts

involved are ordinarily small, and it is not usual to attempt a verification of the details of the petty cash disbursements, further than to get an approval of the petty cash transactions by some responsible person. There are several ways of handling petty cash, the most common being to draw a check for a small amount, say $25, charging it to expense, and crediting Cash. When the fund is exhausted, another check is drawn, and so on. In case any part of the money is spent for an item not chargeable to expense, a corrective journal entry is necessary, charging the proper account and crediting Expense. This rather crude method is complicated in many cases by the petty cashier augmenting his fund by the small cash receipts as they come into the business, for which an entry is passed charging Expense and crediting the party from whom the money is received. A Petty Cash Book is sometimes kept to show in detail the transactions.

The best method is known as the Imprest System, by which a round amount, say $25, is turned over to the petty cashier, charging him in a ledger account and crediting Cash. The amount is usually one that is estimated to be sufficient to cover the Petty Cash disbursements for a certain period, say two weeks, and at the end of the period, the petty cashier turns in a statement showing his disbursements, for which he receives a check, restoring the fund to the original amount. The amount of this check is charged in the Cash Book to such items, expense or otherwise, as are indicated in the statement. The amount charged to the petty cashier in the general ledger stands as a debit until the final surrender of the Petty Cash fund, when the cash received is charged, the amount of the final bill is charged, and the petty cashier's account credited to balance. A Petty Cash Book may be used, showing in a debit column the cash received, and in distribution columns the various cash payments, brought into a total column. At the end of the period the excess of the cash receipts over the total payments is brought down as the opening cash balance for the new period.

The accountant should endeavor to have the Imprest Petty Cash system adopted, and, in any event, must insist that no cash receipts of the business should be taken into the Petty Cash. Every receipt, no matter how small, should be deposited in bank, thus establishing an independent record of all moneys received by the business, and rendering it necessary for some one in authority to go on record, by means of checks, in disbursing it. The method of including petty cash receipts in the Petty Cash fund places in the hands of the petty cashier the receipt and payment of money, without the safeguard of such an independent record.

It is well in making an audit to bear in mind that it is not practicable to verify absolutely all Petty Cash disbursements, and usually the best

plan is to admit this, and merely have the Petty Cash transactions approved by some one who is in authority. In addition to this, every effort should be made to have the client adopt a proper cash system, providing for the deposit of all cash receipts in bank and for all payments to be made by check, with the exception of Petty Cash, to be run on the Imprest System.

Reconciliation of Cash

Provided the amount of cash which was in the business at the beginning of the accounting period, and all subsequent cash receipts, appear on the debit side of the Cash Book, and provided all payments appear on the credit side of the Cash Book, the excess of the former over the latter will be the net cash balance. The checking of the Cash Book with the Ledger having established the fact that all debits and credits have been properly entered in the Ledger, the determination whether the undertaking actually possesses the amount of cash shown by the Cash Book is in order.

The balance of cash shown by the bank at any particular time is likely to be greater than the amount shown by the Cash Book, owing to the fact that checks may be outstanding which have not been paid by the bank. Upon the return of the bank pass book properly written up and showing the cash balance, together with the paid checks, the outstanding checks are determined and their amount added to the balance as shown by the Cash Book. The result should exactly equal the amount of cash shown by the bank. This reconciliation has to take into account, of course, charges for printing of check books, collection of out-of-town checks, etc., and any credits which occur through allowances of interest, if any, on the balances.

It might seem that such a reconciliation, supported by the pass book balanced by the bank, would justify the auditor in concluding that the amount of cash was actually in the possession of the concern. However, the pass book which is submitted to the auditor may not be genuine, and may have been prepared in different handwritings, and defaced to indicate usage, in order to imitate the real pass book. To guard himself against such a contingency, the accountant should receive a certificate from the bank, stating the cash balance as at the date in question. Many banks and trust companies have a regular form upon which to render such a certificate, and if they have not, a letter will answer as well. It is needless to say that the bank will not render such a certificate without request from the depositor, because otherwise it might put into the hands of unfriendly parties knowledge as to its depositor's cash balance. It is best

to file the certificate away with the accountant's memoranda of the particular audit, as it may be valuable in the future for evidence of the work he did in verifying the cash.

Still another contingency which might exist, and which would not be disclosed by the mere reconciliation of the bank pass book with the Cash Book, is that the stubs of the outstanding checks might not indicate the true amount for which the checks are drawn, and, as a matter of fact, a check might be outstanding for which no stub whatever appeared in the check book. Such a condition would render valueless the certificate of the auditor as to the cash on hand. To guard against this, the accountant, at a later period, and before he concludes his work, should have the pass book re-balanced, and at that time he will doubtless receive the paid checks corresponding to the stubs in the check book, and may consider his verification of cash complete.

The foregoing verifies the amount of cash actually on deposit in banking institutions. If there is an amount of cash on hand in the Petty Cash fund, or otherwise, it should be verified by actual counting, thus completing the verification of all cash items. It is a common custom to do this immediately upon beginning the audit.

The verification of payments by comparison of vouchers with the credit side of the Cash Book is a large and important subject and will be undertaken in another Lecture.

Checking the Journal

The Journal, in modern bookkeeping, is generally used only for opening and closing entries, summary entries, and entries not coming within the scope of such books as the Cash Book, Bills Receivable Book, Bills Payable Book, Purchase Book and Sales Book. In it any entry may be made, and for the purpose of an audit it is essential that every item be compared with the ledger account to which it is posted, the agreement of the two books being in this way established. Corrective entries and such important entries as the re-valuation of assets, etc. are recorded in the Journal, and any attempt to vouch the bookkeeping record without a careful scrutiny of these entries would be futile.

If possible, it is well to finish the checking of the Journal at one sitting, or to keep the book in the possession of the accountant until the work is actually completed. It is necessary to use the same precautions in regard to checking the entries, scrutinizing erasures, etc., as have been suggested in checking the Cash Book.

The agreement of the Journal and Ledger having been established, authority must be sought for the various Journal entries. This will involve an examination of vouchers, contracts, deeds, and other documents, and, like the vouching of cash payments, will be taken up in another Lecture.

Checking Subsidiary Books

The Cash Book and Journal must be checked against the Ledger in all cases, but it is not considered necessary ordinarily to make such a minute checking of the other books, unless circumstances exist that render a complete audit advisable.

The same moral effect is obtained on the bookkeeping staff by a thorough checking of a portion of the purchases and sales transactions, the staff, of course, not knowing in advance what portion will be checked.

THEORY AND PRACTICE OF AUDITING.

By HOMER ST. CLAIR PACE, C. P. A. (N. Y.)

LECTURE III.

VERIFICATION OF CASH.

Theory and Practice of Auditing.

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LECTURE III.

VERIFICATION OF CASH.

Definitions.

The word **vouch,** a verb, means to uphold by satisfactory proof or credit. The word **voucher,** a noun, describes any material thing, such as a writing, tally, etc., that serves to verify an alleged act, especially one that certifies to the receipt of money or valuables.

In accounting, a voucher, broadly, is a certification of the transfer of value, either received by the particular undertaking, or transferred by it to another.

Its most common use is in the form of a receipt for money paid, taken in accordance with the usual business practice that requires a receipt, or voucher, for all cash payments.

It is necessary in auditing to seek proof of many of the transactions recorded in books of account, by inspecting vouchers taken in support thereof, which, when signed by outside parties, constitute a valuable and independent means of verifying the record.

Vouching Cash Transactions.

The work of vouching cash transactions naturally divides into the verification of **receipts,** and the verification of **payments.**

The vouching of receipts, to be complete, would take the form of an inquiry as to how much should be received, a determination of what appears of record to have been received, and what is still due to the concern, the latter two equalling the former.

All receipts should be deposited in bank, thus establishing an independent record of cash deposited and disbursed. If this has been done,

the verification of payments takes the form of scrutinizing the disbursements as evidenced by the checks and supporting vouchers.

In the natural order of things the receipts, presenting perhaps the more difficult proposition, should be considered first.

Vouching Cash Receipts.

In the ordinary commercial undertaking, the bulk of the cash receipts comes from the regular customers of the concern, and the only absolute verification would be to determine that every dollar which was properly chargeable to such customers had been duly charged, and all receipts duly credited. For this purpose an understanding with the customer would ordinarily be the best evidence of the regularity of the various charges and credits. This is, in many cases, impracticable, especially in the case of retail concerns, and the condition is sometimes tested by selecting a few of such accounts and obtaining their verification.

Such a verification of customers' accounts should only be undertaken with the approval of the client, and care should be taken to have the correspondence involved reach the accountant without the opportunity on the part of the bookkeeper, or other interested parties, to tamper with it.

In some cases, a complete verification of each customer's account is necessary. In bank or trust company audits, it takes the form of securing from each depositor an agreement as to the balance of his account.

There is always the possibility of error or fraud on the part of the customer in stating the balance of his account, and this is a contingency which should be taken into consideration. A discrepancy merely indicates the necessity for further investigation, and may, or may not, prove fraud on the part of the bookkeeping staff.

In the ordinary course in a business of fair size, the charges to customers are not made by the person who receives the cash. Therefore, if the receipts are not entered and properly credited, the rendering of the monthly statement is apt to provoke an inquiry as to the discrepancy.

The cashier who appropriates a customer's payment is, therefore, confronted with the necessity of securing a credit to the account of the customer, or failing in that, of holding off an investigation as long as possible by destruction of the regular statement, holding up correspondence, etc.

The securing of the credit may be through a fraudulent Journal entry, charging a nominal account such as Allowances, or it may be through

the use of a late payment made by another customer, the account of the latter being adjusted from another collection, and so on.

The fraudulent Journal entry is guarded against by the vouching of Journal entries, as will appear in due course.

The **lapping** of payments, as it is called, meaning the appropriation of a receipt to be made good from later receipts, and so on, can of course be detected by verification of customer's accounts; and frequently it can be detected from an inspection of the details of deposits.

Thus, if the items deposited on any given day do not agree with the receipts, as evidenced by the various entries in the Cash Book, and such discrepancies cannot be explained satisfactorily, the condition indicates **lapping.**

Thus, if Brown is credited with $260.50, and no item of that amount is found in the deposits, the natural inquiry is, In what form was the remittance received that there should be this divergence? Was it deposited next day, or was it received part in cash and part by check?

It is not likely that the subsequent payment would be the exact amount necessary to make good the amount taken, but a check is selected that approximates the amount and the difference is adjusted in cash deposited.

In case of large cash receipts care should be taken that an amount is not carried over to be made good from the subsequent day's receipts, and so on.

If no duplicates of deposit slips are kept (which is a practice that repays the labor involved), and details are not given in the check book, the accountant may obtain an inspection of the original deposit slips on file in the bank, from which he can secure the details for the comparison. In case details of such deposits are kept, he must safeguard himself against erroneous entries therein, made to deceive.

In some classes of business, a formal receipt is issued for cash taken in, and in such cases a comparison of the stubs and receipts taken into the Cash Book is useful.

From what has been said, it will be obvious that **cash receipts** are not ordinarily capable of the exact vouching possible in the case of payments, and the accountant, with the main avenues of danger well in mind, directs his efforts to the circumstances of the particular work in hand.

Receipts from cash sales often present more difficulty in verification than receipts from credit customers, especially where the cash sales are incidental and no adequate protective measures are taken. Thus, it may happen that a bookkeeper approves such sales and receives the cash there-

for. In such a case it should be recommended that a responsible person, other than the bookkeeper, be required to approve, by initialling or otherwise, the sales tickets. An independent test record of the amount so approved could be kept, and, in any event, the bookkeeper will feel that every amount so received is under the scrutiny of another person. If the slips are numbered, or duplicates kept, the accountant will have a fair opportunity to determine whether the proper amount of cash is carried into the accounts.

In the case of cash sales that amount to a substantial part of the entire business, there are various methods in use to prevent fraud. The principle most often used is a duplicate sales record that can be used as a check on the cashier. The principle of the cash register, a common expedient, is to place the clerk on record in the presence of the customer.

Attention is particularly called to the principle of **internal check,** by which work is divided and one employee becomes, to a considerable extent, a check upon his fellows. While it can be applied in small undertakings it is especially adapted for use in enterprises with large office staffs, in which the division of labor can be carried out to a degree not possible in smaller concerns.

Vouchers for Cash Paid.

A voucher for cash paid may be merely a receipt of the payee upon his own stationery, giving in detail the items for which the payment is made. This form of voucher is probably the most satisfactory, so far as evidence is concerned, but, owing to irregularity in size and shape, such vouchers are not as conveniently handled and filed as they would be were they uniform. This may be overcome to some extent by attaching each receipt to a back or cover, which folds to a uniform shape, and which is therefore more easily handled and filed. For convenience in referring to the vouchers, they should be numbered consecutively, and the number of the voucher is preferably shown against the payment in the book of original entry.

A method in common use is for the concern making the payment to use a form of voucher showing at its head the name of the concern, as debtor, with blanks in which the name and the address of the creditor are to be inserted. In a blank space left for the purpose, the details of the payment are given with more or less minuteness, as the practice of the concern may be. It is a common custom not to enter into minute details, but to paste to the form of the voucher the original bills from the creditor, the total being the amount shown on the face of the voucher.

At the foot of the voucher is a blank form of receipt to be filled in with the name of the payee, and the amount of the payment, and to be signed by the creditor in full of the account as stated in the voucher above. This is the usual form of railroad voucher, to which are added blanks for approval by different officers, distribution of charges, etc.

Upon approval of the voucher for payment, a check is drawn for its amount, attached to the voucher, and sent to the creditor, who is supposed to sign the form of receipt, filling in date, and to return the receipted voucher to the concern making the payment.

When the payment is made by mail, the receipt of a properly signed voucher may be delayed through the negligence of the party to whom the payment is made. In such a case the matter should be followed up and the voucher secured. There will always be exceptional cases, however, in which the voucher cannot be obtained, and for evidence of the payment the auditor must fall back upon the canceled check by which the payment was made, or upon such other proof as he may be able to find.

Voucher Check.

There is still another form of voucher, known as the **voucher check,** which is a combination check and voucher, by the use of which the payee receipts for the items shown in the voucher part of the check. This enlarges the size of the check somewhat.

The voucher check has the advantage of combining in one document the paid check and a statement of the item which it settles, the use of the check constituting a receipt for the particular items. In the case of the ordinary voucher, the payee may use the check without giving any receipt for particular items. The voucher check provides a satisfactory voucher for the payment it covers.

Paid Checks.

Ordinary checks, without such evidence of the items which they cover, are not considered satisfactory vouchers, for the reason that there is no evidence of agreement between the parties as to the items the payment liquidates. For example, a payment of $1,000 may be made with the idea that it liquidates a certain item, when, as a matter of fact, the payee may credit the amount for a different item, and hold the other item in dispute. Paid checks, however, are good secondary evidence, and should be relied upon in ordinary cases, when, for some apparently good reason, the voucher itself cannot be traced.

Preparation of Vouchers.

The work involved in the auditing of vouchers will depend largely upon the care with which the vouchers have been kept, their arrangement, and their richness in detail.

It is not uncommon to find them lacking in all these points, and valuable time is necessarily spent in arranging them for inspection. In the case of regular audits, the bookkeeping staff should be impressed with the necessity for keeping proper vouchers, to be arranged for speedy inspection by the accountant.

Inspection and Checking of Vouchers.

With the vouchers for general payments thus arranged in order, each voucher should be compared with the entry in the book of original entry, usually the Cash Book, to determine whether it constitutes a genuine receipt for the amount of money paid, and whether the items it covers are legitimate.

This involves a scrutiny of the signature, which should bear the appearance, through stamps, handwriting or otherwise, that it is genuine. The accountant does not in ordinary cases verify absolutely the authenticity of the particular voucher, but keeps a lookout for suspicious circumstances, investigating fully in such exceptional cases.

The items covered must be studied with a view of detecting fraud. For example, a voucher in a corporation for **legal expenses,** without further explanation and to a person other than the regular attorneys, or in an exceptional amount, would call for a fuller investigation. Such a voucher might cover an erroneous payment to the directors. The circumstances of the particular audit must govern the accountant largely in this matter of scrutiny, for a certain class of transactions may be open to greater suspicion in one audit than in another.

An accountant cannot be held to the absolute determination of signatures upon vouchers, because, in the nature of things, he cannot know all of the signatures that come before him upon vouchers. However, a careful inspection of the documents often leads to the detection of fraud, and the accountant should be expected to take advantage of every clue that can be detected by a reasonable inspection of the vouchers and related records.

It is not usual to check the additions and other calculations in the vouchers, although there may be cases where such checking is necessary.

If the voucher appears regular, the accountant checks with his personal mark the item in the Cash Book which it covers, and indicates on

the voucher, in a conspicuous place, where it can be seen without opening the voucher, the fact of its having been examined. This can be done by a rubber stamp with the accountant's initial, or by the initial alone. It is necessary that this be done in some permanent manner in order that the voucher may not be produced again, and possibly passed in support of another payment.

Payments for Labor.

In addition to the general payments, large disbursements will ordinarily be found for wages. These items are likely to occur at regular intervals, and in fairly regular amounts, and any deviation from such regular order indicates a condition to be investigated.

In the ordinary audit, it is not considered necessary to verify absolutely the payment of wages to laborers, and indeed, such a verification might in many cases be impossible.

The greatest safeguard that can be devised in the disbursement of the large sums involved in wages, is to divide the work of time-keeping, preparation of pay-rolls or wages books, and the actual payment, in such a way that collusion is necessary for fraud. Therefore, in the case of a regular audit, the accountant should study the situation and devise such methods as will, in the particular case, furnish automatic safeguards by such internal check.

In conducting an audit, the pay-rolls or wages books should be examined, all footings therein verified, and sections of the work verified in detail. It is not practicable ordinarily to go back of this and trace the actual receipt of cash by the individual laborer.

In the case of a continuous audit, a checking at the time of each audit of a portion of the pay-rolls in detail produces upon the bookkeeping staff the moral effect of a complete detailed checking, in that the staff cannot be sure which portion of the work will receive the critical examination of the accountant.

Petty Cash.

Vouchers are ordinarily not taken for petty cash disbursements, and the accountant usually contents himself with the certification of the petty cash transactions as a whole, as has been explained. However, an occasional investigation and detailed checking of the petty cash transactions, where it is practicable, results in care on the part of the petty cashier.

In rare cases, large sums are handled and disbursed in cash on the Imprest system, in which case the payments would be verified by vouchers in the ordinary way.

Bills Payable.

In the case of the payment of Bills Payable, Bond and Mortgage, etc., the paid instrument, of course, furnishes the best evidence that the payment has been made.

In the purchase of securities for which payments are made, these securities should be available, or if they have been disposed of, that fact will be traced in its proper order in considering the acquisition and disposition of assets.

The securities that are acquired in this way should be inspected to see that they are authentic and transferred to the owner, or in shape for such transfer. This is a matter for more detailed consideration later.

Comparison of Paid Checks.

Paid checks should be compared with their respective stubs in the check book, to determine whether each check and its stub agree as to payee and amount. Paid checks should also be compared with the vouchers, either as they are checked against the Cash Book, or other convenient time, to see whether they agree.

It is evident that merely an agreement of the Cash Book payments with vouchers, or Cash Book payments, vouchers and check stubs, would not guard against the passing of a fraudulent voucher upon the accountant in order to cover a payment to a person other than the one named in the voucher or the check stub. For example, the check stub, voucher and Cash Book entry may disclose a payment of $100 to John Doe, while the check itself may be drawn to Richard Roe, and by endorsement, show that he, instead of John Doe, received the money.

The endorsements on the paid checks should be examined, for evidence might develop that the person to whom the check was drawn did not receive the amount thereof.

Notation of Irregularities.

In performing all of this verification of cash payments through the inspection of vouchers, it must be remembered that a keen outlook must be kept for irregularities of every nature, and particularly the irregularities which the circumstances of the particular audit indicate are most likely to occur. As the work progresses, notations should be made of matters which require further investigation, and, as these matters are investigated, the ones that are cleared up are checked off from the notations, leaving finally the ones that cannot be satisfactorily explained, and which, with all the information collected in regard thereto, will have to be set forth in the accountant's report.

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LECTURE IV.

JOURNAL AND OTHER VOUCHERS.

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LECTURE IV.

JOURNAL AND OTHER VOUCHERS.

In Review.

A detailed audit involves so many steps that it is desirable, at this point, to recapitulate and view the audit as a whole in order not to lose the relation that each part of the work bears to the other parts.

It was shown that it is necessary to establish the agreement of the Trial Balance or Balance Sheet, submitted as the basis of the audit, with the Ledger, and to establish the accuracy of the footings in the Cash Book and other books of original entry. This is preliminary to the establishment of the agreement of the Ledger postings, used as a basis for the Balance Sheet, with the chronological record kept in the books of original entry.

The entries in the books of original entry constitute the vital accounting record, and the one of greatest weight as evidence in court. The problem involved in auditing, therefore, is to see that the subsidiary records and statements are in accordance therewith, and, further, to see that such original entries are complete in themselves, free from errors of technique and principle, and that no fraud has been committed.

The possibility of fraud is ever present, and is most likely to occur through the wrongful appropriation of the asset **Cash,** which is liquid in its nature and the conversion of which leaves fewer traces than would the conversion of other assets. Therefore, attention is first directed to a verification of cash on hand by counting the money, listing checks and drafts, and reconciling the bank balances. The cash receipts and payments for the period under review are then verified, as has been explained

in detail, and a reconciliation effected between cash on hand at the beginning and at the close of the period.

In a general way, this covers the scope of the preceding lectures, and clears the way for a consideration of the means necessary to verify the entries in the other books of original entry.

The Journal.

In the broadest sense, the Journal comprises all the books of original entry, but the term, as applied to a specific book in modern accounting, describes the one in which opening, closing and extraordinary entries are recorded. Therefore, while the entries are not numerous they are likely to be of importance, and always demand a complete verification in an audit.

All Journal entries must be checked against the respective Ledger accounts and the agreement of the two books established. Errors of technique, wrong postings, etc., may be corrected by the accountant as he proceeds. Errors of greater consequence, and matters that require a fuller investigation, should be noted in the working papers.

Journal entries, like those contained in the Cash Book, should be supported by vouchers, although the form is likely to differ from that of the vouchers supporting cash transactions. Instead of duplicate sales slips, deposit slips, receipts, paid checks, etc., common to the verification of Cash, the vouchers are more likely to be in the form of approval, by persons in authority, of entries involving transfers or allowances, or in the form of contracts, deeds, or other instruments the execution of which presupposes and renders necessary a Journal entry.

Allowances.

Bills are frequently settled for less than their face, either by regular discount, which, in modern books, passes through the Cash Book, or by allowances on account of faulty goods, difficulty of collection, or otherwise.

The passing of allowances is an important matter, ordinarily entrusted to a partner or some one in authority. No allowances should be entered in the Journal or otherwise without the written authority of the person who is charged with this important duty. Therefore, when such practice is in effect, no Journal entry, constituting a charge to a nominal account and a credit to a customer's account, may be made without supporting authority available for the accountant's inspection.

Without the requirement of such formal authority, it is possible for a bookkeeper, who has appropriated a cash receipt from a customer, to pass a Journal entry, charging a nominal account and crediting the customer's account. The effect of this is to set up a loss instead of increasing

the asset Cash. The customer's account shows the proper balance, so that, even though another clerk renders the statements, the fraud is not likely to be disclosed. If such a credit were not made and a statement were rendered, the discrepancy would probably lead to an inquiry from the customer and consequent exposure of the fraud.

The accountant should insist upon the production of the proper authority, and inspect it carefully. He must bear in mind that forged authority may be shown him, and therefore he must be thoroughly acquainted with the signature or initials of the person in authority; and when an allowance seems unusual or out of the ordinary it is a matter for special investigation.

Other Journal Entries.

The purchase price of real estate can usually be determined by an inspection of the contracts, deeds, and other papers in relation thereto, and any expenditure necessarily incurred in its acquisition, even though it is in the nature of broker's commissions, abstract fees or legal expenses, may properly be passed as an asset.

In the case of partial payments, it is necessary to see that the full asset value is carried in, and the liability on account of payments still to be made, set up. Care must be exercised to see that interest upon unpaid instalments is not charged as an asset.

The Journal entries may be rich in explanatory detail, but in any event an inspection of the original contracts or instruments is safer. The Journal may contain only such clauses as the management may desire to have appear, while the actual contracts may disclose facts of importance, affecting the financial standing of the concern.

In vouching Journal entries great care must be exercised to determine the basis of valuation, which will require the consideration of contracts and other data.

Transfers between Ledger accounts must be scrutinized, and when the reason therefor is not entirely apparent, an investigation must be made to clear up the doubt. Failure to investigate such a transfer may leave fraud undetected, as where a credit is erroneously made to a customer's account and another account charged.

The revaluation of assets, which would be recorded in the Journal, raises many questions to be investigated. For example, the determination whether or not it is based upon the estimate of reliable and independent appraisers, or upon the mere caprice or opinion of the management, and the ultimate effect of the adjustments, are matters of importance. In case of an increase, the resulting credit may be used to offset a

debit to Profit & Loss, or erroneously to increase the net results of current operation. Abnormal conditions of this kind should be set forth in the accountant's report.

An accounting record should contain all the facts necessary to state the financial history and condition of the particular enterprise. Therefore, a comprehensive view of the business itself is necessary to guard against errors of omission. For example, the failure to include a loss and the liability therefor, as might be the case with rent, wages, etc., would be an error of omission, and is one that should be detected by the accountant. Even more difficult to detect and include are the indirect expenses of **depreciation,** or the wasting of asset value through use, effluxion of time or obsolescence, the estimated losses upon collection of accounts receivable, etc.

The inclusion of all items necessary to the correct determination of profit and loss and financial position, raises vital questions of principle, to be discussed later. At the moment, the **authority** for entries is in question, and in these matters of principle the accountant himself is the authority, and he cannot relieve himself of the responsibility, in case he certifies to profit and loss outcome and financial condition, of passing upon such entries.

Any entry may be made in the Journal, so that all principles of verification, cash or otherwise, may be necessary in its treatment.

Voucher Register.

The voucher register is employed as a book of original entry to record liabilities on account of purchases, and it may include liabilities incurred for other items, such as rent, cartage, etc. A document known as a voucher, heretofore sufficiently described, is used for the collection of the items for wh ch a credit is to be made, and the various bills and documents are attached thereto. There are blanks for approval by persons in authority. Thus, a voucher may be approved for entry, while another approval may be necessary before it is actually paid.

This systematic collection of data in relation to a particular bill, and its formal approval, is a condition that aids the accountant in his work of verification. A close scrutiny must be maintained, however, especially in regard to items that are exceptional in their nature.

The credit balance of the Unpaid Vouchers Account represents the liability on account of vouchers entered, and should be checked against the unpaid vouchers in the office. As in the case of the omission of liabilities where the voucher register is not used, it is necessary to determine that

all proper liabilities are included; therefore, they must appear either in the Unpaid Vouchers Account or in some other account that will record the liability.

Sales and Purchases Records.

A complete detailed audit involves the verification of sales and purchases, although, in practice, this is not always done.

Considering sales, there would remain after the cash audit, only the sales on credit. The original record will be in a sales book, or some form of it, supported by the original orders turned in by salesmen or received in the mail. The additions of the sales record being proved, the entries are checked against the proper ledger.

The orders from salesmen may be of importance in determining that proper commissions have been credited to the respective salesmen. In some undertakings, commissions are credited or paid only upon the presentation of customers' orders.

In the matter of purchases, the duplicate orders, usually kept as a part of the office routine, support the purchase record, and they may be of value in determining that credits are being made in accordance with orders given. Collusion between a clerk and a creditor is possible; hence the duties of order clerk, receiving clerk and bookkeeper should be performed, where practicable, by different persons. In case the orders were given, invoices approved and entry made by the same person, the order record would not be particularly valuable evidence of the authenticity of the purchases record.

Returned sales and purchases involve entries that should be vouched by some one in authority. The vouchers should be inspected and any discrepancies noted.

Returned sales, which involve credits to customers, should be supported by evidence from the receiving clerk that the goods are received in due order. Such credits are in the nature of **allowances** and are important for the reasons stated in dealing with that subject.

Bills Receivable and Bills Payable Books.

The transactions in Bills Receivable, other than payments or discount operations recorded in Cash, are likely to consist of the receipt of notes in settlement of open accounts, or in renewal of other notes. It is essential that the proper account receives credit. The renewals call for closest inspection, for uncollectible accounts may be carried indefinitely in this way, and in a case that looks suspicious on its face, the accountant should not be satisfied with anything less than an adequate explanation.

In certain phases of auditing it is sometimes found that advances of cash to relatives or friends, without proper authority, are carried in this way.

Bills Payable are most often given for money, in settlement of open accounts, or in renewal. It is necessary to determine that the notes were properly issued, and to see that proper offsetting debits were made, either of asset or benefit received or liability liquidated. Great care must be exercised to determine that all of the bills and notes given are carried into the accounts. For example, under a contract for $10,000, bills were rendered, approved and entered for $3,000. Subsequently, the contract was completed and the bill for the remainder did not appear in the office. A check for $3,000 was given in the office and a ninety-day note for $7,000 given by one in authority without the knowledge of the office staff. A consideration of all the contracts, and an understanding with creditors as to balances, brought to light this and similar cases. In such a case, however, the accountant would be cautious in giving his certificate, qualifying it to take care of conditions possible under such inefficient office management.

Deliberate fraud would be still harder to guard against, for while inadequate records hamper the work of the accountant, in the absence of fraud the sincere co-operation of the client and entire office staff can usually be secured.

It is hardly necessary to say that a properly kept book of blank notes, with all stubs accounted for, and an assurance that no notes were otherwise issued, constitutes an ideal, but unusual, condition. Many notes, notably those given to secure the payment of property bought upon the partial payment plan, are of a special form, and are brought to light through the inspection of contracts.

The general fact is that the verification of bills payable is a difficult matter, and the illustrations are given to make clear the fact that the records, including many documents and letters, must be studied in order to disclose all of such evidences of indebtedness.

In General.

There may be other original records, but the lines of voucher verification have been sufficiently noted.

Happily, fraud is the exception and not the rule. It is always possible, however, and it is the accountant's duty to prove that the accounting record is correct and, therefore, that fraud does not exist. If fraud develops, it is a flaw in the record, to be presented and treated as the case requires.

No matter what confidence may be placed in an employee, the accountant should not trust to such confidence in lieu of obtaining facts. It must be remembered that defalcations are rarely committed by persons in whom confidence is not placed.

The utmost tact is required in conducting an audit in order to obtain the co-operation of clerks and to avoid their antagonism. By gentle insistence, the facts may be developed. If certain information is not produced, the accountant should ask again and again until he secures it. It is not best to be peremptory upon the first request for an honest employee may be angered or a dishonest one put on his guard. A repeated and persistent refusal upon a vital matter is suspicious in itself, and, with proper handling, may bring to light facts of importance.

Verification of Previous Balance Sheet.

It has been stated that an audit covers the verification of an accounting record from a prior authenticated position to a subsequent time, and that, ordinarily, the verification does not extend to a point prior to such first position. It is necessary, however, for the accountant to determine that the facts as set forth in such prior Balance Sheet agree with the facts in the Ledger as at the same date. Otherwise, the basis, that is, the possession of assets and the amount of liabilities which are standing in the Ledger and which serve as a basis for the work, may not, as a matter of fact, be the prior authenticated financial position as disclosed in the Balance Sheet.

In the case of a new audit, it would ordinarily be unwise to certify to a Balance Sheet that had been verified only to the extent of an audit of the last accounting period, and an acceptance of a Balance Sheet which had been verified at the beginning of the accounting period. It must be remembered that reliance will be placed upon the accountant's certificate that the assets and liabilities of the undertaking are as stated in the Balance Sheet, and the accountant cannot escape at least the moral responsibility for error, if the assets and liabilities are not, as a matter of fact, as stated.

It will, therefore, be necessary for the accountant to satisfy himself that the assets are valued in accordance with sound accounting principles, and for this purpose it may be necessary to trace them back to their acquisition, and to determine that adequate provision is made for depreciation, losses upon collection, etc., or in the absence of such provision, to state that no such provision has been made. It is not always possible for an accountant to prevail upon his client to provide sufficient reserves for

depreciation, losses upon collection of book accounts, etc., but in his certificate he may at least state just what action has been taken.

Audit of Partnership Accounts.

The points of difficulty that ordinarily arise in the statement of partnership accounts are in respect to division of profits and adjustment of interest upon capital contributions, and therefore engage the attention of the accountant in his verification and report.

As a basis for such an audit, the partnership agreement should be secured. If properly drawn, it will furnish the guidance that the accountant needs. The partnership agreement will be but temporarily in the possession of the accountant, and, in perusing it, careful and full notes of the most important provisions should be made for future reference.

If any of the provisions affecting the statement of the accounts are not clear, an understanding should be had between the partners, and preferably reduced to writing, and the matter should then be handled in accordance with such understanding.

In the case of a verbal partnership agreement, any doubtful matters affecting the interests of the respective partners should be taken up with the partners at a meeting at which all are present, and at which an understanding upon the points in question should be obtained. The accountant should make notes of the understanding and make his adjustments accordingly. Great reliance is placed upon the accountant's judgment in many cases, but he must not undertake the responsibility of making agreements for his clients and giving effect to them in the books of account. His work is merely to carry the agreement, when made, into effect in the accounts.

In the absence of agreement, interest is not allowed upon capital contributions nor upon withdrawals, and it does not follow from an agreement to allow interest upon capital contributions that it is to be charged upon drawings. The profits, in the absence of agreement, to the contrary, are shared equally, irrespective of the capital or services contributed by the respective partners.

In crediting partners for interest upon capital, the entry is carried out even though no profit has been earned. This is necessary to give effect to the agreement and to bring the capital accounts to a point where they measure the interests of the respective partners in the assets of the fiım.

In the case of charges to partners' accounts for interest upon withdrawals, the credit is carried to a final division of the Profit & Loss Account to distribute the effect. In the case of interest upon contributions the amount is carried to the final division of Profit & Loss as a debit.

The debits and credits, although carried to the Profit & Loss Account to secure the proper distribution, do not represent an expense or profit of the business, but merely an adjustment among the partners for unequal contributions or withdrawals, and therefore should be excluded from a statement prepared to show the net earning capacity of a partnership.

Salaries drawn by a sole trader, or by partners, are usually in anticipation of profits, and are not treated as an expense in determining net profits. If it should be desired to ascertain the amount of net profit available for dividends which could be obtained by a corporation organized to carry on a business formerly conducted as a partnership, it would be necessary to take into account an amount sufficient to cover the value of the services of officers who would perform services equivalent to those formerly rendered by the partners.

Partnership Profits.

The rule of partnership law is that, in the absence of an agreement to the contrary, profits are considered as of the period in which they are actually realized, and not as of the period in which they are earned. This means that in a statement of partnership accounts no partner is compelled to accept as a profit any unrealized asset, but only to accept cash upon realization.

The accounting rule, of course, is to consider profits as of the period in which they are earned, even though unrealized. Thus, if $5,000 of cash is exchanged for $5,000 of merchandise, and the latter for $8,000 of accounts receivable, the $3,000 excess of the amount of accounts receivable over the amount of the merchandise, less the expenses and a reasonable provision for loss on collection, is considered profit. It is apparent that such a profit consists of accounts receivable, and being unrealized, the amount which will be realized is to some extent speculative, and therefore should not be forced upon a partner.

The apparent conflict between the accounting practice and the law is overcome by the **agreement** of the partners. If the usual accounting procedure is carried out, and the results accepted by the partners, either tacitly, as a matter of custom, or expressly, by the signing of the new balance sheet, it amounts to an agreement that the interests are as stated.

In the absence of such implied or express agreement the legal rule, as given, applies.

Therefore, in the audit of partnership accounts involving the preparation of statements, an express agreement as to the respective interests should be obtained, either by written contract, or, as is more usual, by the signing of the balance sheet which is prepared.

Partnership Capital Contributions.

Care should be exercised by the accountant conducting a partnership audit to see that contributions of capital are treated as capital, and not as advances, and that in the case of the contribution of property the value, whether it is an amount arbitrarily fixed and agreed upon, or in the absence of such agreement, the realized value, is credited to the capital account of the contributing partner.

On the other hand, equal care must be exercised to see that amounts which are advanced as loans, and not as capital, are not carried to capital, as such advances have priority over capital in liquidation.

Competing Business.

A partner must account for profits which he makes in any undertaking which competes with the partnership business, and in conducting an audit the accountant must watch for evidence of such competition. Even when it is found it may be a matter which is understood by all the partners, and therefore not a subject for special report.

A special investigation is frequently made in partnership settlements, with the detection of such competition, and its results, one of its principal objects, and in such a case it assumes vital importance.

Partnership Good-will.

There are other matters of importance in the examination of partnership accounts, among which may be mentioned the question of Good-will, which is especially likely to raise at the time of the dissolution of a partnership through death or otherwise.

In many cases, the partnership agreement, which is the vital instrument in stating and limiting the rights and duties of the respective partners, will supply the information upon which the adjustment of the Good-will is made at the termination of the partnership. The subject is to be considered elsewhere and at this point it is sufficient to call attention to the importance of the partnership agreement in determining the course of the accountant in the examination.

THEORY AND PRACTICE OF AUDITING.

By HOMER ST. CLAIR PACE, C. P. A. (N. Y.)

LECTURE V.

REPORTS.

Theory and Practice of Auditing.

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LECTURE V.

REPORTS.

Definitions.

A **report** is a statement or presentation of facts in respect to a particular audit, examination, investigation, or subject.

An **opinion** is a professional conclusion or judgment, to a considerable extent based upon known conditions or facts, but falling short of certainty.

The distinction should be well understood, for the accountant, unless otherwise instructed, merely states the facts disclosed by his work in auditing, uncolored by his own opinions, conclusions, or judgment.

In giving an opinion, when called upon for that purpose, the accountant should proceed with the conservatism that will alike safeguard his own reputation and prevent ill-considered action upon the part of his client or others depending upon his judgment. The matters directly connected with the installation and operation of accounting systems and business organization are peculiarly within the province of the accountant, and are fit subjects for opinions and recommendations.

The accountant is often requested for an opinion as to future profit and loss outcome, based upon past results, probable production, markets, etc., to be used for the purpose of influencing investors and others. In such a case it is well for the accountant to content himself with a statement of facts as to past results, and allow others, if they choose, to deal in prophecies over their own names. The young accountant, in particular, before making estimates of future revenue, should first, for a period of years, note the percentage of cases in which, for unforeseen and unforeseeable reasons, expected income fails to materialize.

This Lecture is designed especially to state the principles involved in the presentation of accounting facts in reports.

Principles of Presentation.

The presentation of a whole thought or idea, in the attempt to convey an understanding of facts, is better, even though it be in condensed form, than the presentation of a part of such thought at a time. This is especially true in accounting, owing to the difficulty of imparting a knowledge of conditions from figures.

Thus, it may be said that a man has a capital, or worth, of $100,000.

If it is stated that he has $50,000 of personal property and $50,000 of real property, making a total of $100,000, the information is amplified. Observe, however, that if the latter statement were made independently of the first, there would be steps in the conveyance of the whole idea. Thus, the statement "he has $50,000 of personal property," by itself imports but a part of the facts as to financial position.

It may be that the personal property is divided into $25,000 of merchandise, $15,000 of accounts receivable, and $10,000 of cash, and that the real property is divided equally between country and city holdings. The main fact as to financial worth thus develops into detail without great effort on the part of the reader. Nevertheless, one who reads no further than the first paragraph, stating the worth to be $100,000, has a complete idea, although meagre in details.

If the items were numerous, say 50 or 100, or more, the mind could not carry their relative weights, and, pending the achievement of a total, a confusion of ideas and facts would exist.

The main fact and its amplification may be presented in a graphic way to show the development, thus:

Worth $100,000	Personal Property $50,000	Merchandise	$25,000
		Accts. Receivable...	15,000
		Cash..............	10,000
	Real Property.... $50,000	Country...........	$25,000
		City..............	25,000

The presentation is complete at each stage, and the reader may pass on to details, or not, as he chooses. The analysis can be carried still further by a division of merchandise into classes, accounts receivable into desired groups, cash into different bank accounts, etc.

This principle is applicable to the presentation of facts in English without figures. For example, it has been stated that—

Accounting is the science of recording facts in relation to property rights.

Amplifying this basic statement, we may say that—

Accounting is the science of recording and stating facts in relation to the acquisition of property rights or values.

Still further **amplifying** the statement, we may say that—

Accounting is the science of recording and stating facts in relation to the acquisition, production, conservation and transfer of property rights or values, known as assets.

From this point, it may be shown that the **recording** has to do with the accounting records and the **stating** has to do with forms of statements to disclose results; and the various other essential words may be used as texts for detail extending, if desirable, into volumes.

The method of stating a fact and developing it by supporting statements, and still further statements, is useful for many purposes. The supporting statements are said to **articulate** or join into each other, although the word does not satisfactorily give the idea of an expansion of detail in statements arranged in a logical order of fact development.

Principles Applied to Receipts and Payments.

An audit, and the report thereon, may deal with a particular phase of the accounting record, and not cover a complete detailed verification. The most common illustration of this is known as a **Cash audit,** which is that part of an audit that has to do with the verification of receipts and payments of cash.

The presentation of the results of such a special audit will now be undertaken for the purpose of illustrating the principles that have been stated.

A Statement of Receipts and Payments, or as it is sometimes known, a Statement of Receipts and Disbursements, is merely a record of the incoming and outgoing of the asset cash, presented with such degree of detail as the particular case may demand.

It may be assumed that a theatrical enterprise had four companies, A, B, C and D, presenting plays during the months of October, November and December, 1902. During the month of October, the receipts of A were $20,000, of C $10,000, and the other two companies had no receipts. During the month of November, the receipts of A were $11,000, B $10,000, C $2,000 and D nothing. During the month of December, the receipts of A were $4,000, of B $5,000, of C nothing, and of D $13,000. The total receipts were, therefore, $75,000. The payments for October were: A $21,000, C $5,000, and the other two companies nothing. The payments for November were A $5,000, B $10,000, C $2,000 and D nothing. The

payments for December were A $1,000, B $6,000, C nothing and D $11,000. The total payments, therefore, were $61,000. The cash on hand was the excess of receipts over payments, amounting to $14,000.

It will be assumed that the foregoing facts have been verified, and that it is desired to state them in form convenient for ready understanding by one without accounting knowledge.

It is obvious that the figures must be recast, in order to afford an intelligible idea. First of all, following the principles before stated, the summary of receipts and payments, with the resulting cash balance, should be shown to convey an idea of the transactions as a whole.

It may seem to the lay mind illogical to present a summary, or summing up, before the facts upon which it is based are presented, but it naturally results from an acceptance of the principles stated. The summary, like the porch to a house, provides the entrance, but it is the last to be constructed. The summary results from a recapitulation and condensation of the various schedules and statements. There is nothing to prevent a reference to the summary after a consideration of the details, in case it is needed for a review of the situation.

In the attempt to analyze the receipts in the case given, it is found that they may be analyzed either by companies or by months. Inasmuch as there was not a complete operation of each company for each month, and also in view of the fact that comparisons with months of other years are not required or possible under the conditions, a statement of receipts and payments by companies is the first step in amplifying the summary.

The next step in the analysis is to show the receipts of each company by months. By this method, the mind is gradually carried from a condition that is comprehended to statements involving more detail. The arrangement is such that one may leave off consideration of the statements at the end of any one, with a complete idea to that point.

The statements, especially arranged to illustrate the application of the principle, follow:

BLANK THEATRICAL COMPANY.

Statement of Receipts and Payments for Three Months Ending December 31, 1902.

Summary.

Receipts, as per attached	$75,000
Payments, as per attached	61,000
Balance, Cash on hand	$14,000

Statement by Companies.

Receipts:		
A	$35,000	
B	15,000	
C	12,000	
D	13,000	
Total Receipts		$75,000
Payments:		
A	$27,000	
B	16,000	
C	7,000	
D	11,000	
Total Payments		61,000
Balance, Cash on hand, as per Summary		$14,000

Statement of Companies and Months.

RECEIPTS:			
A—			
October	$20,000		
November	11,000		
December	4,000		
		$35,000	
B—			
October	0		
November	$10,000		
December	5,000		
		15,000	
C—			
October	$10,000		
November	2,000		
December	0		
		12,000	
D—			
October	0		
November	0		
December	$13,000		
		13,000	
Total Receipts			$75,000
PAYMENTS:			
A—			
October	$21,000		
November	5,000		
December	1,000		
		$27,000	
B—			
October	0		
November	$10,000		
December	6,000		
		16,000	
C—			
October	$5,000		
November	2,000		
December	0		
		7,000	
D—			
October	0		
November	0		
December	$11,000		
		11,000	
Total Payments			61,000
Balance, Cash on hand, as per Summary			$14,000

If the presentation of results by months is desirable, tables may be used, in lieu of the statements, that will show the total receipts by months, the company receipts by months, the total receipts of each company, and the grand total. This affords a display of detail with an economy of space, but the detail is not so readily followed as in the former statements, and it is not so fortunate an illustration of the principle under elucidation. The tables follow:

RECEIPTS.

Month	Total	A	B	C	D
1902					
October....................	$30,000	$20,000	0	$10,000	0
November..................	23,000	11,000	$10,000	2,000	0
December..................	22,000	4,000	5,000	0	$13,000
Total..................	$75,000	$35,000	$15,000	$12,000	$13,000

PAYMENTS.

Month	Total	A	B	C	D
1902					
October....................	$26,000	$21,000	0	$5,000	0
November..................	17,000	5,000	$10,000	2,000	0
December..................	18,000	1,000	6,000	0	$11,000
Total..................	$61,000	$27,000	$16,000	$7,000	$11,000

The principle that produces the economy of space in the foregoing tables is the use of each amount under two classifications. Thus, the amount $21,000 under A, is opposite October, and means that the payments of A in October were $21,000. A summation of both classifications is possible, so that company totals, as well as month totals, are available. The total of company totals must equal the total of month totals, so that this amount, $61,000, supplies a check figure to guard against mistakes. Thus, if an amount is omitted from the B column, the company totals will not prove against the summation of the month totals.

The total column, like a summary, is stated first in order to convey a complete idea at first glance. The principle involved in the use of such a column is used throughout accounting, in books of account, in statements and in the analyses that form, especially in auditing, a large part of the accountant's work.

For economy of space it is usual to use the side column for the more numerous items. Thus, if a list of customers' accounts were to be made, showing items not due, overdue less than 30 days, overdue from 30 to 60 days, and overdue more than 60 days, the total column and the four classifications would each be given a column, and the names of the accounts would be listed to the left. The work would be proved by determining that the totals of the distribution columns equaled the total column.

It should be observed that a proof of this nature proves totals, but errors in distribution, by which an amount is placed in the wrong column, would not be detected thereby.

If we consider the statements again, it will be observed that the net outcome as to receipts and payments for each month is not shown. It could be calculated from the figures given, but if it is likely to be needed, the accountant should make the calculations and present the figures. It could be done in this way:

	Total	A	B	C	D
1902					
October:					
Receipts	$30,000	$20,000	$ 0	$10,000	$ 0
Payments	26,000	21,000	0	5,000	0
Balance	$4,000	—$1,000	$ 0	$5,000	$ 0
November:					
Receipts	$23,000	$11,000	$10,000	$2,000	$ 0
Payments	17,000	5,000	10,000	2,000	0
Balance	$6,000	$6,000	$ 0	$ 0	$ 0
December:					
Receipts	$22,000	$4,000	$5,000	$ 0	$13,000
Payments	18,000	1,000	6,000	0	11,000
Balance	$4,000	$3,000	—$1,000	$ 0	$2,000
Grand Total	$14,000	$8,000	—$1,000	$5,000	$2,000

The difficulty in the preparation of the foregoing statement is that there are three classifications in the table, namely, companies, months and classes of transactions (receipts and payments). The last classification was avoided in the preceding statement by making two statements, one for receipts and one for payments, as indicated by the respective captions. To cover in the one statement the three classifications, the net result of each month is obtained, and the totals for the months added for

the grand total. This is a common expedient, but it might be avoided by making an entirely separate statement for each month, and then bringing the totals into a separate recapitulatory statement.

The shortages that occurred in certain months were indicated by a minus sign. Thus, in October the payments of A exceeded the receipts by $1,000, leaving a shortage so far as that company was concerned. C, however, produced an excess of receipts over payments of $5,000. The aggregate excess of receipts over payments was $4,000, obtained by subtracting the payments from receipts in the total column, and proved by subtracting the minus $1,000 from the $5,000. If there were no shortages, the proof would be secured by cross adding the company totals. Instead of the minus sign, italics or a different colored ink may be used to indicate an inverse element, such as a shortage or deficit.

The Statement of Receipts and Payments could be displayed in the form of a Cash Book, receipts to the left or debit side, distributed in columns to conform to the companies, with a total column, and a similar arrangement for payments on the right or credit side. This is a usual form for simple statements.

The methods of presentation given seem to cover every possible requirement, and the circumstances of the case would determine which of the statements could be eliminated. The principles of presentation and statement construction are of importance owing to their universal application, and the use of receipts and payments is merely an illustration.

The Form of a Report.

One of the two prime objects of accounting is the determination, at any desired time, of the financial position. This is displayed in one of the two basic statements of accounting known as the Balance Sheet.

The other prime object of accounting is the determination, for any elapsed time, of revenue, or profit and loss. This is displayed in the other basic statement of accounting, known as the Profit & Loss Account. There are various forms of such an account, but a consideration thereof is not essential at this point.

The statements named form the basis for nearly all reports in accounting and auditing, for it is usually essential to present the financial condition, together with a showing of results of administration over a period of time extending back to a former statement of financial position.

The simplest report covering both objects is made in the form of a Balance Sheet and Profit & Loss Account, with a certificate that they correctly state, respectively, financial condition and profit and loss results.

When there are conditions that call for comment, the statements may be accompanied by an explanatory letter or report, discussing the items; this report usually precedes the statements proper. Following the principle of presentation, it is desirable to begin the report, in many cases, with a summary of conditions.

While there are two well-defined objects in Accounting, and it is usually necessary to present both statements in a report, one is likely to be of greater importance than the other. For example, the question of profit distribution may be foremost, and the state of assets and liabilities, disclosed by the Balance Sheet, while of importance, may be secondary.

On the other hand, a banking institution is likely to have but few proprietors, or owners, and thousands of depositors. The latter, for whose benefit statements are published, are interested primarily in the financial condition, that is, the ability of the bank to meet all possible demands upon its assets, and not in profits. Hence, the Balance Sheet, or Statement of Assets & Liabilities, as it is often called by such institutions, is of first importance.

In the event that the income is of primary importance, a summary thereof might be presented, thus:

Gentlemen:

In accordance with your instructions, I have audited the accounts of the Blank Company for the year ending December 31, 1902, and find the outcome as to Profit & Loss, in summary form, to be as follows:

Net Sales	$142,520
Net Cost of Sales	77,715
Gross Profit	$64,805
Expenses	41,890
Net Profit	$22,915

Instead of the condensed revenue statement, in some companies a condensed balance sheet may be given if the financial position is of first importance, or both may be given.

Following the condensed statement, which supplies the general thought or idea as to the vital facts, the comment in the body will amplify and deal with the items in the summary first given. In the case of a Revenue or Profit & Loss Account, it may deal with the items of expense by referring to the amplified statements appended, and giving reasons for increases or decreases. This is the more readily done if such supporting state-

ments are made in comparative form, similar items being compared for two or more years. Thus a 10 per cent. increase in wages, or increased volume of business, or both, would account for a certain increase in wages, and a miners' strike might account for increased cost of coal.

The items in a Balance Sheet might be dealt with in the order of headings. Thus, a fire insurance adjustment and rebuilding would justify special comment upon Plant & Machinery. In this way, no item calling for special note would be overlooked.

The order, then, as far as stated, would be:

1. Condensed, or summary, statement, usually of Revenue.

2. Comment thereon with reference to attached Profit & Loss Account, which in turn may be supported by schedules of detail.

3. Comment upon Balance Sheet items, which may be supported by schedules.

4. Miscellaneous comment and recommendations with reference to any special statements.

5. Balance Sheet, with supporting schedules.

6. Profit & Loss Account, with supporting schedules.

7. Special statements.

The order may be varied to suit conditions, but the report is best prepared along the lines of presentation, by summaries, of complete ideas, supported by articulating statements expanding in detail, but leaving, at the termination of each, a finished or completed idea.

Intermediate Theory and Practice of Accounts.

By HOMER ST. CLAIR PACE, C. P. A. (N. Y.)

LECTURE I.

CONSTRUCTIVE ACCOUNTING.

Intermediate Theory and Practice of Accounts.

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LECTURE I.

CONSTRUCTIVE ACCOUNTING.

In General.

Accounting may be defined, broadly, as a record of financial transactions. In its developed state, narrowing the definition to a commercial enterprise in which accounts are kept by double entry, it provides for an initial record of assets and liabilities and the resultant investment, and for all changes subsequently occurring therein.

The record must include the transactions in the property rights and values that are employed in the particular enterprise.

The record must also include the transactions with each individual, either debtor or creditor, with whom the enterprise has business relations.

The record must also provide, under the double entry method, for nominal, or statistical, elements, by which the sources of increased values, and the expenses or losses, measuring a past or future reduction of asset values, are shown.

The value of the accounting record will depend, to a considerable extent, upon the classification of facts in regard to each subject of interest.

The primary classification is into debits and credits in respect to property, persons or subjects, and is effected by journalizing, in one form or another, the principles and practice of which have already been sufficiently considered.

Ledger Account Classification.

The journalizing may provide for but one general property account, to be raised in the Ledger, to which all debits and credits arising out of property transactions would be carried. Under such a procedure, in-

formation in regard to a specific piece of property would be obtained by an analysis of the original record, in which the details would be recorded.

The natural development from this point consists in the creation of additional ledger accounts for property, to each of which are carried the debits and credits pertaining to a specific piece or class of property.

Thus, a general account might be provided for real estate, or an account might be created for each distinct parcel of real estate. If all debits and credits arising out of real estate transactions were carried to such a general real estate account, a continuing classification of real estate property, as distinguished from other property, would be made, and the net book value thereof would appear as a debit balance in the ledger account and in the statements prepared therefrom. If accounts were raised for each tract or parcel, then the classification would be carried still further, and the debit balances of the accounts would show the value of the respective parcels.

In the same manner, the other items of property might be classified in the original record and made available through ledger accounts, the divisions and captions depending largely upon judgment. In practice, the classification of property into accounts follows such general lines of subjects as may, in the particular business, afford ready information as to the state of any class or piece of property, with the minimum of effort in making the bookkeeping record.

So far as the transactions with persons, debtors and creditors, are concerned, the natural and ordinary classification is to provide an account for each individual, to which are carried all the debits and credits resulting from the transactions with such person. The net result, or balance, of each account will disclose the net asset or liability, as the case may be. The attempt, sometimes made in the case of small concerns, to run one general, or summary, account for accounts payable, unsupported by vouchers, does not often give good results.

In recording nominal elements, by which statistics as to the increases and decreases, known as profits and losses, are recorded, the simplest method would be to provide a general income, or profit, account, to disclose gross gain, and a general expense account, to disclose the costs or expenses that are an offset thereto.

In response to the demand for knowledge of causes, essential to successful management, an analysis of the expense elements is made into classes of costs, continuing throughout the accounting period. For example, the cost of salaries, wages, insurance and rent, might each be collected in a distinct account, a general expense account being maintained only for such costs as would not classify under one of the stated divisions.

The income or profit may also be classified, if it arises from different classes of transactions. In such a case, the direct charges to each class may be held in distinct expense accounts, and the general charges distributed on some equitable basis, so that the net result as to profit and loss can be determined as to each class of transactions. This is the basis for departmental accounts, by which the trading or operating result of each department is ascertained.

The limitation upon the classification of property transactions and nominal elements by ledger accounts is of a bookkeeping nature. In practice, such classification is found desirable in the accounts of the smaller traders and manufacturers. When the number of the accounts becomes too great for convenience in bookkeeping, the classification can be secured with less labor by other means, as will be explained.

Columnar Ledger Development.

The creation of the numerous ledger accounts necessary to a minute classification burdens the Ledger, and renders necessary the handling of a large number of accounts in the trial balance. In addition, while it gives a classification of the transactions affecting a particular thing or subject from its nature it prevents a view of the transactions as a whole. Besides having the expenses divided into five distinct classes, it may also be desirable to have available in one place the entire amount of expenses, with the relation of each class to the other classes shown.

To relieve from the labor of handling additional ledger accounts, and to secure the advantages of a total record and the association of the constituent elements, resort is had to the columnar development of the ledger account.

Thus, one ledger account could be opened for Expense, ruled with the ordinary columns for date, folio, and debit and credit amounts, but with additional columns on each side for the five classes of expenses necessary in the particular undertaking. In making the entry in the book of original entry, the classification to which it belonged would be noted, for example, Salaries, and the amount would be posted in the ordinary debit column, and the amount would also be placed in the classification column for Salaries.

The foregoing process continued would give for any desired period an account that would disclose the total charges to Expense, together with an analysis of the various constituent elements. The proof of the entry of the items in the distribution columns would be secured by the summation of such distribution columns and the determination that the aggregate thereof was the same as that of the total column.

Any credits arising could be carried to the credit side and distributed in distribution columns provided therein in the same manner, although in the case of expenses, such credits are apt to be rare, and in order to save ledger space, they are often indicated by red ink entries on the debit side, or are subtracted and the balance carried down, thus avoiding entirely the usual credit side of the account.

Such an Expense Account might include all the nominal elements of expense or cost, or it might include and classify only those that are commonly charged to a so-called Expense Account.

The debit ruling of such a ledger account, showing the total and distribution columns, is as follows:

Date		Explanation	F	Salaries	Rent	Freight	Cartage	General	Total

Instead of providing a credit page with the full ruling as shown above or making the red ink entries or deductions in the above ruling, a credit column could be provided adjacent to the debit column. Credit entries could then be entered in the classification columns in red and, in proving, the work, the total of such red ink entries in a column could be deducted from the total of the black ink entries. The summation of the results of the distribution columns should then prove with the **balance** of the regular debit and credit columns.

In the same manner, a property account may be developed, and an analysis of transactions made by the columnar method. Thus, a real estate account may be analyzed as to land, buildings, betterments (not repairs), etc. The credits are likely to be more numerous in prop-

erty accounts than in nominal accounts, so that a complete duplicate ruling for the credits is often necessary.

Sales or earnings may be classified by a columnar ledger account, instead of maintaining a distinct account for each class. Thus, in the case of a company supplying gas to private consumers and to a city, the gas sales could be displayed in this way:

Deductions (Dr.)	Date	Details	F	Private Consumers		Municipal		Total (Cr.)
				Regular	Prepayment	Streets	Buildings	

The deductions (allowances) on account of bills and sales are comparatively infrequent and are entered in one debit column. This would have to be analyzed periodically and the deductions made from the respective columns. Or, in the case of numerous deductions a debit column could be provided for each class of sales, either at the extreme left, or the debit and credit columns for each classification could be adjacent, with the total debit and credit columns to the extreme right.

It is not intended to consider fully gas accounts at this time, but merely to illustrate the principle of ledger account development.

Advantages of Columnar Ledger Accounts.

Columnar development of ledger accounts, so far as classification of transactions is concerned, has many uses, although like many other expedients in accounting, it is not desirable in all cases.

In the accounts of small undertakings, with the total number of accounts within reasonable limits, there is little use for it.

In case a compiled analytic statement of certain phases of the business is often needed, the columnar ledger account offers a ready and reliable means of meeting the condition. Columnar classification, as compared to classification by separate ledger accounts, requires addi-

tional work at the time of posting, because the usual debit is made, as well as an entry in one or more distribution columns. It should be borne in mind, however, that there is compensation in that it is necessary to turn up but one account, instead of several; that the distribution into columns and the proof thereof safeguard, to some extent, against error; that there are fewer accounts to handle in the trial balance; and that an analytic statement of the subject is available at all times.

There may be columnar development of the ledger account of a somewhat different nature. Thus, in addition to the usual debit and credit columns, a third may be provided, into which is carried the **balance** of the account after each entry, so that the net state of the account appears, In such a case, it is usual to place the debit, credit and balance columns at the extreme right, in the order stated. This ruling is sometimes used in customers' accounts, and in other cases, as will be shown later.

The Ledger, however, in a broad sense, is but a classification of the accounting record, and all devices that are employed therein are useful only to the extent that they make available the facts essential to an intelligent understanding and management of the affairs of the concern.

Classification in Books of Original Entry.

The classification secured by the columnar ledger, while useful in many cases, requires, when it merely supplements and analyzes the record made in the books of original entry, practically a duplication of the labor required in such original entry work. It is true that the columnar ledger may, in certain cases, be used profitably as a book of original entry and ledger combined. At the moment, however, the use of the columnar ledger as an adjunct to customary books of original entry, is in mind, the defect of which, for undertakings of considerable size, is that the results are secured without proper economy of effort.

It is obvious that the most economical procedure, if practicable, would be to arrange the original record in such a way that each fact could be placed under its proper classification upon its original entry. This, if completely carried out, would do away with the idea of a distinct Journal and Ledger record. In practice, this rarely happens, for there is a certain value in maintaining the distinction, as will more fully appear, but for the purpose of illustrating the fact that such a record is possible, and in some cases practicable, the case of a combined Journal and Ledger for household accounts may be cited. The ruling is as follows:

HOUSEHOLD ACCOUNTING RECORD.

Date	Details	Cash		Furniture		Debtors		Creditors				Capital		Expense						Income			
														Household		Personal		General					
		Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.			Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.

In the operation of the record, the initial assets, liabilities and capital are entered in the respective columns, the debits and credits of which will balance. Subsequent transactions are entered with due distinction as to debit and credit. For example, a cash payment for household expenses would require a credit in the **Cr.** column provided for Cash and a debit in the **Dr.** column provided for Household Expenses. The totals of all columns would be carried forward from page to page until the time of closing. Nominal entries could be collected in a Profit & Loss Account in the column left blank at the time of closing. Or, the necessary transfers could be made direct from the expense accounts to Income Account. The undrawn income could then be transferred to Capital Account. A trial balance could be taken at any time, although the record is itself a form of trial balance, with ledger captions arranged from left to right instead of in the ordinary running form.

The use of the foregoing is limited to accounts in which the transactions are few and there is no need of extensive classification. It is a simple record on which only one person could work at a time, and if the bookkeeping required the entire time of one person, more comprehensive records would be needed. The ruling is chiefly useful as an illustration of the fact that the original record may, in itself, supply the necessary classification.

Classification in Cash Records.

In the simple household accounts heretofore considered, it was shown that a classification, inclusive of all transactions, could be made in a single record. It would cover Journal, Cash Book, and Ledger functions, with all necessary display of essential facts, on a single page.

In large undertakings this would be impracticable, owing to the number of transactions and the desirability of a more minute classification. The original record in larger enterprises is likely to provide for the grouping of related transactions, such as cash receipts and payments, sales, purchases, etc., and the attempt at classification is directed to one or more of such records.

The Cash Book affords a conspicuous example of the grouping of similar transactions, and it is often developed by columnar classification. As has already been shown, the Cash Book is, in principle, a Ledger account in which direct entry of cash receipts and payments is made. A saving of effort is effected through the addition of columns to hold items to be posted in totals periodically.

In a simple form of Cash Book, this development extends to the use of a column for items of expense, on the credit side, and for cash sales, on the debit side, with additional columns for discounts if such associated items are recorded in the Cash Book. The columns provided usually cover the greater number of transactions, but they effect only a few Ledger accounts. Many postings will be made, however, from the general column, affecting a large number of ledger accounts.

The fuller application of the columnar principle to the credit side of the Cash Book would provide for a classification of all transactions associated with money payments. It would include all costs or expenses, and all property, paid for in cash.

The success of the Cash Book distribution depends upon the maintenance of a cash basis, or a condition that approaches closely thereto. Otherwise, liabilities would be incurred on account of costs and property, and the entry and distribution of the latter would be postponed until cash settlements were made. Entry and distribution could, of course be made in the Journal, which could also be used to carry in unsettled and accrued items at the time of closing the books.

On the debit side of the Cash Book, the receipts, if from cash sales or returns, could be distributed under suitable captions, but the entry of sales or returns that pass through accounts recording transactions with customers could not be postponed until date of settlement, because the state of the specific account could not, in the meantime, be ascertained from the books.

It is obvious that the Cash Book classification is dependent upon the flow of cash in and out, a matter that is not in many cases immediately associated with the acquisition of assets and the incurrence of costs, and which, therefore is not well adapted to the control of the accounting record.

The nearer the business approaches a cash basis, the more satisfactory such a distribution will be, and there are many cases in which the method produces satisfactory accounting results. Its use is largely confined to small water, gas and electric light companies, where collections and payments are upon practically a cash basis, to the accounts of fire insurance companies which approach a cash basis, and to the conditions found in clubs, associations and other undertakings where the state of affairs is substantially as outlined.

In the form of record devised for household accounts, no separate ledger is needed, for the record, complete in itself, serves every ledger function. When the record is divided, however, the various parts must be brought together to provide a view of the accounts as a whole and to give the characteristic double-entry proof of accuracy. Therefore, the ledger resumes its place as an essential record, and the classification, as made in the separate parts of the original record, is carried to the ledger, either in an account for each classification, or to a summary or controlling account that controls several such classifications.

It may be accepted as a principle, that the Ledger is a necessary record in systems of modern columnar books in which classification is largely made in the books of original entry. It is necessary to establish the periodical proof of the double-entry accuracy of the records, and to afford a view of the accounts as a whole.

For the purpose of illustrating the principles that have been presented, the credit side of a Cash Book, ruled to show total cash payments, distribution into three property accounts, five expense accounts, and a miscellaneous column for items not coming within the distribution columns, is given as under:

Date	Details	Folio	Total Cash Cr.	Property				Expense						Miscellaneous
				Real Estate	Fixtures	Tools	Total	Wages	Salaries	Supplies	Salesmen	General	Total	

A ledger account could be raised for each subject in the record, and a posting made thereto at the stated time, usually at the end of a month. In highly developed books of this kind, a ledger account is provided only for the **total** of each general division. Thus, in the use of the ruling given, an account would be raised for Property, and one for Expense, and a posting would be made at the month-end for the total in each case. The original record is thus brought into the ledger in summary form, and reference is made to the Cash Book for more detailed information.

The classification can be recapitulated, for convenience, by months and years, either on a page reserved for that purpose, or in a special book. This can be done in the same ruling as is provided in the Cash Book, or separate rulings may be made. A special ruling, covering the item of Expense, is as follows:

MONTHLY EXPENSE RECAPITULATION, 1902.

Month	Total	Wages	Salaries	Supplies	Salesmen	General
January................						
February...............						
March..................						
April..................						
May....................						
June...................						
July...................						
August.................						
September..............						
October................						
November...............						
December...............						
Total..............						

The total of each classification would be entered from the Cash Book at the end of each month, and the record would serve much the same purpose as a columnar ledger account; in fact, it could be used as a ledger account and the summary ledger account omitted.

A similar recapitulation could be made for Property and for any other subject. A yearly statement could be made for a series of years by using the yearly, instead of the monthly, totals.

Simple rulings and examples have been chosen to illustrate the principles. In practice, recapitulatory statements are common and, in many cases, exceedingly useful.

Voucher Record Classification.

The principles of the Voucher Record have heretofore been stated, and it is here intended merely to study it from the classification viewpoint.

The Voucher Record is a book of original entry, designed to classify items of property and costs, and to provide, by a summary credit posting, for an account controlling the liabilities on account of such items. The distributions are posted as debits to ledger accounts.

Entry in such record is dependent only upon the acquisition or incurrence of the item, and it is therefore not subject to the uncertain flow of the asset cash. For this reason, it is suitable for use in undertakings, irrespective of whether or not they are on a cash basis.

It will be recalled that the detail of the transactions with the creditor is recorded in a document known as a voucher. Unpaid Vouchers account, the summary account with creditors, is charged from the Cash Book. When the Voucher Record covers all items for which settlements must be made, no entry need be made on the credit side of the Cash Book except to Unpaid Vouchers, which simplifies that part of the Cash Book and renders all classification columns unnecessary.

A Voucher Record, however, covers only purchases, that is, items of property and costs, so that sales or income must be entered in other records. This may be done in classified columns on the debit side of the Cash Book, or in classified sales records, or in both, depending upon whether the business is transacted upon a cash basis, a credit basis, or both. The Voucher Record, therefore, supplants only purchase records and credit classifications in the Cash Book.

The distribution columns for debit postings may be increased in number in order to make any desired classification. In case the postings become too numerous for convenience, groupings may be made and the totals posted to a summary account, as was suggested in the case of the Cash Book.

In case the divisions are so numerous that they cannot be conveniently handled in one book, the Voucher Record proper can be reduced to a few summary classifications, as, for example, Property, Operating Expenses, etc., and the voucher totals entered therein. The distribution can then be made in subsidiary analytic records from the details provided on the voucher. Thus, the subsidiary analytic Expense record might be provided with twenty classifications, into which the items would be distributed from the Expense vouchers. The total of such distributions would then be proved against the Expense column in the Voucher Record. This method provides for the convenient handling of the work with complete analysis.

The specific devices are innumerable, but they rest upon the few principles stated. A book of original entry may expand by the addition of columns until its size renders it cumbersome. It is then reduced by the treatment of subjects in summary form, supported by subsidiary analytic books.

The classification that is secured in Bills Receivable and Bills Payable records, and in Sales Books, has been sufficiently considered in previous lectures. The field of possible classification, therefore, so far as principles are concerned, has been covered.

In Review.

A review and summarization of the lecture will be undertaken to insure a grasp of the principles involved.

The object of classification is to make available the information, in respect to transactions, that is essential to management. The subject has been developed by certain well defined stages, viz.:

1. The primary distinction is as to debits and credits, applied for convenience to three distinct subjects or divisions, as under:

   (a) Transactions with property;

   (b) Transactions with persons;

   (c) Statistical or nominal elements, that result from (a) and (b).

2. The further classification necessary in each of the groups (a), (b) and (c) is secured by providing, for such items as may seem advisable, additional ledger accounts.

3. The number of Ledger accounts, when burdensome, is reduced to general groupings, and the classification necessary under each is secured by a columnar display in the Ledger account.

4. The classification may be made in books of original entry. The Cash Book, which is fully considered, is a notable example, and furnishes the basis for certain undertakings.

5. The classification in books of original entry, when conditions are not favorable to a distribution based upon the receipts and payments of cash, is best made in the Voucher Record and correlated books and distribution records.

The accounting devices that are incidental to each stage of development may be profitably applied to innumerable sets of transactions. Thus, under the second grouping, will be included the accounting of the great number of concerns whose transactions do not require a system more elaborate than a Journal, Cash Book, and Ledger. It would be wasteful to apply the expedients of an analysis-supported Voucher Record to such a case.

The most suitable system is the one that, all things considered, secures the legitimate objects of accounting in the particular case, with the least effort. The accountant, therefore, should have the scope of possible development well in mind, know the limitations of the different bases, and plan his constructive work accordingly.

The rulings herein given are not particularly useful or valuable except to the extent that they make clear the principles of constructive accounting. Attention should rather be paid to the latter, for they control innumerable states of fact, and once thoroughly grasped, may be applied with comparative ease.

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LECTURE II.

CONSTRUCTIVE ACCOUNTING.

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LECTURE II.

CONSTRUCTIVE ACCOUNTING.

In General.

The need for classification is present throughout all accounting, and there are innumerable rulings and devices by which it is accomplished. In the previous Lecture, the subject of classification was treated in its fundamental aspects, and rulings and forms were given to illustrate the principles presented.

A further consideration will now be undertaken, dealing with still other practical rulings and devices. The student, in this way, will obtain a working knowledge of many of the expedients common to different phases of accounting.

Ledger Account Rulings.

The prime essential in the ruling of a Ledger account is that there shall be a debit and a credit money column, or at least that there shall be provision for making the distinction between debit and credit items, which, in their nature, are opposed to each other.

A common departure from the standard ledger ruling is the substitution of a Journal ruling, in which the debit and credit money columns are placed in apposition at the right. This form is often used for customers' accounts, where the debits are likely to exceed greatly in number the credits, and where the balance of the account is a matter of frequent interest. The ruling results in a saving of the major part of the space that is allowed for explanations on the credit side. On account of this saving, two, or even three, accounts may be placed in the width of a Ledger page. The ruling is as follows:

JOURNAL-RULED LEDGER ACCOUNT

Date	Explanation	F	Dr.	Cr.

As a variation of this ruling, a third column, to contain the balance of the account, may be placed to the extreme right. This is used for customers' accounts, and it is also used in the ruling of a stock, or shares, ledger in a corporation in order that the total number of shares belonging to a stockholder may be shown at all times; and, in general, it is useful where it is desirable or necessary to show regularly the balance of the account. The following ruling is given in illustration of the Journal-ruled Ledger account with a balance column added:

JOURNAL-RULED LEDGER ACCOUNT, WITH BALANCE COLUMN

Date	Explanation	F	Dr.	Cr.	Balance

A condition might arise where it would be desirable to have the debit and credit columns in juxtaposition, while preserving the usual amount of space for explanations in regard to both debit and credit items.

To meet this condition, the following ruling is often used:

SPECIAL RULED LEDGER ACCOUNT

Date	Explanation	F	Dr.	Cr.	F	Explanation	Date

The foregoing ruling is well adapted for the display of statistical information. The money columns are contiguous, as in the Journal-ruled form, but the usual explanation columns are maintained, so that the detail in regard to the money entries may be entered and classified. In the Journal-ruled account, the explanations for both debit and credit entries are entered in one column. In case the detail consists of quantities of articles, such as stores or shares, the intermingling prevents their summation.

The last ruling may advantageously be used for loans secured by collateral, as the collateral may be shown as it is received and surrendered. In material or stores accounts, too, it may be desirable to keep a record of quantities as well as of values, and this can be done in the space provided for explanations. Other rulings may be used for this purpose, but the one given answers well under conditions in which there is an advantage in having the money columns in apposition and space for detail classified between debit and credit. There might be cases in which there would be an advantage in having the statistical, rather than the money columns contiguous, and the ruling could be modified to meet the conditions.

A variation of the foregoing ruling is the addition of a balance column, which may be placed between the debit and the credit columns, at the center of the ruling.

Boston, or Tabular Ledger.

The so-called Boston, or Tabular, ledger is a development of the Journal-ruled account that has been shown. The important accounting feature in each is that provision is made for the regular presentation of

the balance of the account, usually, but not always, in a column provided for that purpose.

The tabular ledger, however, arranges the accounts in statement form, with the caption of the accounts to the left and a series of distinct rulings to the right. One complete ruling, with debit and credit columns, and perhaps a balance column, is provided for a certain fiscal period, which may be a day, a week, a month, a quarter-year, or a year, as is needed. These rulings follow one another from left to right across the page, opposite the caption or name of the account.

If there should be no more than one debit and one credit for each fiscal period, one line across the page would be enough for an account, as is shown by the following:

1902	January			February			March		
Client	Dr.	Cr.	Balance	Dr.	Cr.	Balance	Dr.	Cr.	Balance
John Doe	500	200	300	200	300	200			
Richard Roe. . .	1000	0	1000		1000	0			
Total.	1500	200	1300	200	1300	200			

The balance in the second period is determined by deducting from the total of the debit and the previous balance, the credit, thus establishing the state of the account as a basis for the next period. With certain modifications, the foregoing ruling would provide in a professional office for the ledger record with clients.

The state of account, and its relation to the other accounts, is disclosed by an inspection of the book. The summation of the columns gives total charges, total credits and total balance, thus establishing an effective control of the entire tabular ledger.

In case the debits and credits were more numerous, as would be likely to happen in practice, several lines would be given to each account. There is a limit, however, to the vertical space that can be thus given, because the tabular form is dependent upon associating a number of accounts on a page. Otherwise, assuming that an account took a whole

page, there would be nothing secured beyond that which is available in an ordinary ledger account, with the balance of the account brought down periodically. In order to secure proof by totals, the balances would have to be abstracted the same as for a trial balance.

The practical limit is a maximum of six or eight separate entries, during the business period, although if a summary were made elsewhere, the result of numerous transactions could be entered in the tabular ledger. Thus, twenty charges made in a month might be made and summarized in another record, and the total entered in the tabular ledger as one amount, and a similar procedure could be used in respect to credits.

Depositor's Ledger.

A typical application of the tabular method is found in the treatment of accounts with depositors in bank accounting. The **balance** of the account is of vital importance. It establishes a basis for credit, its amount must be known to make certifications of checks, and it must never be overdrawn, that is, a debit balance is not permissible. Therefore, it is necessary to require by the accounting procedure that the balance be determined and displayed for the smallest possible fiscal period, that is, for each business day.

In bank accounting, too, owing to the fact that money, the quickest and most convertible of all assets, is handled in large quantities, there is a need for daily proof of the accuracy of the accounting record. The tabular form, which approximates a continuing statement, supplies such internal check with the minimum of effort.

The form that was originally used, and that is still used by many banking institutions, is as follows:

Boston Ledger, Full Ruling

Depositors

	Monday				Tuesday				Wednesday			
Year	October 1				October 30				October 31			
Depositor	Checks		De-posits	Bal-ance	Checks		De-posits	Bal-ance	Checks		De-posits	Bal-ance
	De-tails	Totals			De-tails	Totals			De-tails	Totals		
John Jones.............												
Harry Loomis...........												
Etc., Etc.												

It will be noted that the deposits are entered in the credit column, while there is a total debit column to record payments of checks or other charges that are an offset to the deposits. The balance of the account is carried to the balance column. The separate checks may be listed in the column for details, although this column is often omitted. The succeeding day the same procedure is carried out. To determine the balance to be carried forward, the deposits for the day are added to the balance from the preceding day, the excess of the total of such deposits and balance, over the checks paid and other charges, being the new balance. This procedure is carried out from day to day. If there are no transactions, the amount is left unchanged.

The balance column is added and the total carried forward from page to page. The total is useful for the internal check that is a part of the procedure in bank acounting, as will appear elsewhere.

The foregoing ruling has in many instances, in practice, evolved into a ruling with merely a series of debit and credit columns. A debit and a credit column is provided for each day, and the day is started with the balance as a credit. The deposits are brought in total from the deposit slips and entered in the credit column, together with any

other possible credit, such as interest. The total of checks paid, checks certified and collection charges, are entered as a debit from the original records, and the excess of the credit column is the amount to be carried forward as a credit to the next day. The balance standing to the credit of depositors being known as at the close of the preceding day's business can be proved against the general ledger controlling account. The ruling is as follows:

BOSTON LEDGER, SKELETON RULING

Depositors' Ledger

	Date		Date		Date	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
John Jones.....						
Harry Loomis...						
Etc., Etc.						

The ruling, in bank accounting, is subject to many modifications, depending upon the volume of business and the amount of internal check that is considered necessary. The forms given are illustrative, although they are both common in practice.

The use of the tabular ruling for depositors' accounts is made practicable by the summation of items deposited, and of charge items, in the original records, and the entry of the totals only in the ledger.

Tabular Ledger for Periodical Charges.

The business period for which the ruling is made may be short or long, as the case may require. Illustrations have been given of the use of the ruling for daily rests and monthly rests, and one for a longer period will now be given.

In many undertakings, notably those supplying water, gas and electricity, charges, payable in cash, are made at regular intervals to customers or consumers. In such cases the amounts are practically all paid shortly after the charge is made. This is often brought about by the grant of a rebate for prompt payment or the imposition of a penalty for delay. For charges thus made and paid, the tabular ledger becomes a mere register, showing offsetting debits and credits. The unpaid items constitute the accounts receivable, and are comparatively few in number

Especially in water companies, where charges may not be made more often than quarterly or half-yearly, the ruling is in common use, and is known as a Consumers' Register. To show its operation the following ruling is given:

Contract No.	No. of house	Consumer	Quarter Ending June 30, 1902									(Same ruling for succeeding quarters)			
			Balance Due April 1, 1902	Contract Rate	Charge	Extra	Date Rec'd	C. B. Folio	Amount Rec'd	Allow-ances	All'ce B.F.	Balance Due July 1, 1902			
		John Street													
1	150	John Doe........	5	20	5	0	Apr. 30	12	10	0					
18	140	Richard Roe.....		40	10	yd. 5						15			

The foregoing record is, in effect, a classification in a subsidiary ledger, ruled in tabular form, controlled by summary entries in a general ledger. It is noteworthy in that it embodies the principles of the Boston Ledger, but is designed to meet conditions that differ widely from those in bank accounting. Instead of daily transactions in which the immediate balance is of primary importance, there is a condition in which periodic charges are made in fairly stable amounts. The two conditions coincide, however, in that the business for a period, one day or a quarter, largely offsets and a balance alone is carried forward.

In the use of the foregoing form, the names of consumers may be arranged by streets, or in any convenient manner. There are advantages in arranging the accounts by streets, as will be more fully explained elsewhere.

At the beginning of the period the total due from customers will be shown by the first money column. The contract rate detail, if there is no change, need not be rewritten for succeeding periods. The charges are based

upon inspectors' reports, and may, in some instances, be based upon meter readings. The date of payment is stamped, or written, in the column provided for that purpose, and indicates settlement. Provision is made for allowances by a special column. The balance due, determined by deducting from the summation of balance due at beginning of period and all charges, the total payments and allowances, is carried in detail to the balance due column in the succeeding ruling.

The use of the totals of the columns will be readily understood. The total charges will be posted to a controlling account for consumers and sales or rates credited. The total payments and allowances will be charged to Cash and Allowances respectively, and the Consumers' Controlling account will be credited. The balance of the latter should prove with the total of the balance column in the Register at the beginning of the period.

The ruling is largely illustrative and would be modified in practice to suit the specific conditions.

Constructive Principles.

The principles governing the display of accounting facts in ledger accounts, together with numerous illustrative rulings, have been given in this and the preceding lecture. Many more examples might be given, but sufficient have been presented, it is hoped, to make clear the salient principles, which will now be recapitulated.

Ledger accounts are created to collect, for convenient reference, facts in relation to transactions in property, transactions with individuals, and the increases and decreases in accounting capital that result from such transactions. Each account, for identification purposes, is given a name or caption.

The prime essential, in the construction of a ledger account, is that provision shall be made for a distinction between accounting debits and credits, usually first indicated, although not necessarily so, in another accounting record.

The rulings may be arranged in the way that will most conveniently display the distinction between the debits and credits, the detail necessary to their understanding, and the difference, or accounting balance, that results from the offsetting of such debits and credits.

The debit or credit entry may be a summary, with the detail analyzed in columns provided in the account for that purpose, resulting in the columnar form of ledger account.

The accounts may be arranged in statement or tabular form, so that a continuing statement, in form convenient for the determination of totals and the proof of accuracy, is secured.

The common ledger ruling is the most satisfactory for the great majority of the smaller enterprises. In very large undertakings, the ledger, as such, is reduced to but little more than a check upon the double entry principle by a few accounts, largely summary or controlling in their nature.

Finally, and most important of all, no form of ruling should be blindly accepted, but the conditions existing in the particular case should be studied, and the ruling devised and adopted that will insure the proper classification with the least effort.

Loose-Leaf and Card Devices.

In the consideration of the ruling of the ledger account, no particular attention had been paid to the manner in which the accounts should be bound or collected for their classification use. In the usual form of ledger, which has been assumed, the rulings are printed upon pages, either one or more to a page, as the size of the ruling and page and the needs of the particular business require, and the pages are bound into permanent book form. With such a binding, in case of error or fraud, a page cannot be removed from the binding or a page cannot be substituted for another, without a mutilation of the book. There is, therefore, a considerable safety and satisfaction in having a record that contains the entire classification and in which the relation of each account to the others may be studied as to transfers, dates, etc., with the knowledge that the entire record is in hand.

In the development of the ledger, one book is found inadequate for the accounts of a concern with a considerable business, so that the ledger is divided, as has been shown elsewhere, into several distinct books. Thus, there may be a general ledger, a private ledger, a creditors' ledger and one or more ledgers for the accounts with customers, which may be divided alphabetically or geographically. By this division of the accounts into different books, records of a convenient size are secured, and a division is made that renders possible the employment of several bookkeepers in the work.

Each unit, or separate book, however, is used in its bound form under certain mechanical limitations, among which may be mentioned the following:

1. The inclusion of accounts that are closed, and, therefore, of rare interest. These accounts must be handled continually in referring to the accounts that are open and active, thus increasing the bulk to be handled and the difficulty of access.

2. The loss of space incident to the grouping of accounts. It is

often useful to arrange ledger accounts in alphabetical or other grouping, and to insure this blank space sufficient for the maximum probable needs of each division must be provided. This will always result in an amount of unused ledger space, which must be handled continually and a part of which will eventually be lost.

3. The inability to divide the record. The bound book prevents the division of the record in case statements are to be prepared, or lists made, or any work performed in which it is desirable to have more than one person work upon the material contained in a single book.

4. The aggregation of work incident to opening a new ledger. The transfer of accounts to a new ledger, when a ledger becomes so nearly filled as to render its further use impracticable, necessitates a large amount of work to be performed within a limited time.

Further disadvantages in the use of bound books may come to mind, although it is believed that, in principle at least, they are covered in the foregoing. In a general way, the disadvantages of the bound form lies in that it cannot be kept free from inactive records and it cannot be divided for the purposes of classification and work.

The limitations are in the binding, for without it the accounts appear upon loose leaves, which, providing that a sheet is given to each account, may be sorted and re-sorted into any desired groupings. An account may be removed when it is closed, and a sheet is added when a new account is opened. In this way all of the disadvantages of the bound volume are overcome.

New difficulties arise, however, chiefly in regard to safeguarding the record against accidental loss of a part thereof and fraudulent substitutions and abstractions.

Before considering the methods employed to overcome or minimize such dangers, attention may be called to the fact that a ledger account is not usually an original record, but a mere classification of that which is first recorded elsewhere. For this reason, as a general proposition, the objections to the loose leaf method have less weight in regard to the ledger than to the books of original entry. A new ledger can be constructed from books of original entry, but new books of original entry cannot be constructed from a ledger.

The loose-leaf devices fall into two classes, viz., loose-leaves and cards. The loose leaves are used in a binder that retains the form of the bound book, into which loose leaves may be placed. They are retained by a clamp or a lock. In the case of a lock, a key is provided, so that its possession is a prerequisite to the insertion or abstraction of leaves without mutilation. The arrangement is governed by leaves or tags that give an

alphabetical or other desired grouping. The sheets of paper, in some cases, are water-marked and numbered by the manufacturer and this, under proper restrictions, constitutes a further safeguard. An example of the use of loose-leaf ledgers is furnished by one of the largest industrial corporations, which keeps its stock ledgers, showing the ownership of the shares into which its capital is divided, on the loose-leaf basis.

The cards are cut from bristol board or stiff paper in any desired shape and size and are kept in trays or boxes. They are bound, if at all, by a rod or other device that secures them in their place. They are more convenient for sorting and distribution than leaves from a loose-leaf ledger and their use is indicated whenever such sorting is frequent. The danger of accidental loss of cards is greater than is the case with ledger pages although, in well conducted offices, the chance of the loss of cards is slight. Card ledgers are used by some savings banks, where the depositors' accounts are kept on cards, but such use is not yet general. The use of cards is principally confined to statistical records.

The tabular ledger ruling is not conveniently handled on cards, but otherwise any of the ledger rulings can be used with the loose-leaf devices. There are many important uses for these expedients to be considered later.

The attitude of the accountant should be the same as it is toward other devices and expedients. He should thoroughly understand the uses and limitations of each and in his constructive work select and adopt that which, in his judgment, will best serve the interests of his client. Just as no one remedy in medicine is a panacea, so no one expedient in accounting meets all conditions. Were it otherwise, there could be no profession of Accountancy.

Intermediate Theory and Practice of Accounts.

Applied Economics and Organization.

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LECTURE III.

CONSTRUCTIVE ACCOUNTING.

Intermediate Theory and Practice of Accounts.

APPLIED ECONOMICS AND ORGANIZATION.

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LECTURE III.

CONSTRUCTIVE ACCOUNTING.

In General.

In the accounts of merchants, engaged either in wholesale or retail trade, the greater part of the accounting detail arises from sales and purchases of merchandise, and the settlements made with customers and creditors.

The basis may be cash or credit, or, most often, a combination of the two. As a general rule, retail merchandising more nearly approaches a cash basis than wholesale trading.

Many devices have been evolved to economize effort in making the accounting record of these transactions, some of which will be considered in this lecture.

Recording Sales.

It is customary for the vendor to render the vendee, or customer, an itemized bill of goods sold. The name of the customer, the date, the details of goods sold and the charge will appear thereon. The bill, therefore, includes all information that is likely to be required for the purpose of future reference, and all that would appear in an original record, from which, in fact, the bill is often copied. If the same facts are recorded in the original record, say a sales book, there would thus be the work of twice writing the same facts.

The principal labor-saving that can be effected in recording sales is to avoid one of the processes, by making a duplicate that will save one writing. This may be done by means of a carbon paper or by letter press copying. The carbon or copy serves as the original accounting record, from which the posting of the charge may be made to the customer's account. In this way, one writing is saved.

Instead of loose forms, to be made in duplicate or copied, the original and duplicate bills may be bound in a book, with perforations that make possible the removal of the original bills. The remaining duplicate bills become the sales book, from which postings are made. The bills, owing to the bound form of the book, are written with a special pen or pencil, and the duplicate is secured through the insertion of a carbon sheet.

A more practical method is the use of unbound bills which are prepared in duplicate upon the typewriter. The duplicate is in a form convenient for use in a loose-leaf binder, into which all duplicates are placed, and which becomes the Sales Book. In this may be seen the operation of the loose-leaf principle in the original record, by which great economies in effort are secured.

The chief difficulty that develops in the use of duplicate bills as a sales record is that the form of the record prevents proper classification on the record itself. Thus, if five different classes of merchandise are sold, a subsidiary columnar record is necessary to make the classification. This is easily accomplished when sales are recorded in a regular sales book by the use of the columns, but the duplicate bills, in the method under discussion, are large, and cannot be classified in a manner convenient for summation. This is overcome by the use of a subsidiary sales record, into which the amounts are posted under any desired classifications.

The accounts of a concern that produces and trades in certain builders' supplies will illustrate one way in which the sales may be treated. The bills are made in duplicate on the typewriter. The original is sent to the customer and the duplicate is pasted into a book kept for the purpose, although a loose-leaf binder would in most cases be preferable. From this book the postings are made to the customers' accounts and the amount is carried to a **sales register** and placed in a total column and in its proper distribution column. If the bill covers more than one class of merchandise, this is indicated so that the distribution can be made to columns, provided in the sales register for the various classes. In this concern, the name of the customer and date of bill are also entered in sales register, because it is desirable to display the names of the customers in a form that will give an idea of who is buying and the classes of goods bought by each. The duplicate bills cannot be viewed as a whole in the same manner as a compact sales register. In fact, inasmuch as there are but two bills on a page in the duplicate bill book, it is difficult to obtain therefrom such information. The inclusion of names and dates is not always necessary, and if not, a mere columnar analysis of sales will answer, and a greater saving of effort is made.

The sales register affords totals from which, at the end of the month,

the customers' controlling account is charged and the various sales accounts are credited. The customers' accounts are posted from the duplicate bills, so that the agreement of the customers' controlling account and the customers' ledger proves the work.

In conjunction with the foregoing, a voucher record, in the ordinary form, is used, and a cash book, thus completing the system.

The saving in the method is the use of the carbon copy for a record of the detail of goods sold, inasmuch as the name, date and amount are entered in a record that is substantially a sales book. The system is not given as a model, although in the particular business it works well.

There are cases in which the original bill is made by the salesman, as is the case in many retail establishments. The duplicate serves substantially the same purpose as the ordinary duplicate. A posting is made to the customer's account, in case of a credit sale, and the sale is carried to the proper classification in a register provided for that purpose. There would, in such a case, be a monthly recapitulation of the charges rendered to the customer, which, in the case of a retail establishment, usually contains full detail.

The principles are capable of much ingenious amplification, to meet the needs of the particular enterprise, but they will be found to be substantially the same in all trading accounts.

Payments to Creditors.

The practice of securing a receipt, release or acknowledgment of payment at the time of liquidating a claim, has existed from time immemorial, and in the case of payments in actual money is of great importance. Nearly all payments are made in modern commerce by checks that must be endorsed by the payee before collection, so that evidence is secured, without special effort, of the receipt by the creditor of a certain amount of money.

Nevertheless, an ordinary paid check is not an entirely satisfactory form of receipt, for it does not specify on its face the items it settles, and may be applied in the absence of instructions, as the payee elects. It is the custom, therefore, to return with the check the bills covered thereby, in order that they may be receipted. In many cases, they are attached to a voucher heretofore described, and the latter is receipted. In either case, considerable effort is required in following up the receipts and vouchers and in filing them. So great is this, that it is not uncommon to hear of a concern that takes no receipts, a practice that is not usually approved by accountants.

The obvious remedy, and the one adopted by many firms, is a combination voucher and check, the use of which is a receipt for the items specified on its face.

The use of varying and clumsy styles of voucher checks led to the appointment of joint committees by the American Bankers' Association, The Society of Railway Financial Officers, The Association of Railway Accounting Officers, and The American Association of Public Accountants, for the purpose of recommending forms that would meet the various requirements of the voucher check, with a minimum of undesirable features. For the guidance of students, who will later be engaged in devising accounting systems, it has seemed advisable to quote from the report of the joint committees as follows:

"A voucher check or a draft voucher is used when it is intended to convey more information and detail than a single check. It furnishes accurate statements of account coupled to receipts therefor and proof of settlement through a bank.

"It should contain nothing that may affect its negotiability. It should throw upon the payor bank the responsibility for only the following items:

"(a) Its genuine and correct signature.

"(b) The ascertaining of the sufficiency of funds to meet it.

"(c) Alterations in the check portion.

"(d) Correctness of the endorsement.

"For many years, bankers, merchants, manufacturers and railroads have been burdened with crude and cumbersome forms of voucher checks which were devised for the purpose of combining a detailed receipt for payment with an order to pay. The vouchers oftentimes have not been in negotiable form, have been covered with advertising, have consumed much unnecessary time in scrutinizing, have compelled anyone handling to unfold and refold and, altogether, have been about as objectionable and awkward for the service they pretended to give as can well be imagined."

In substance, the following resolutions were adopted:

That the voucher check be made in negotiable form;

That a voucher check should be in the form of a straight check or draft, and endorsement of the payee thereon be accepted as the only receipt required;

That a voucher check should be of the standard check size and in the standard draft form, with the number, date, account and signature at the right and in the order named, and the name of the payor (Bank or Treasurer of Company) in the lower left hand corner, and that where a folded voucher is considered necessary by railroad companies, it should fold to standard check size, the check or draft to be at the bottom;

That when a detachable check is used it should be in the standard form described above;

That the number, the date, the amount and the signature should all be in evidence on the right hand side of the check;

That the paper of the original should be of good quality and that the paper of the copy should be of a different color to distinguish it easily and the copy may be of inferior quality;

That no advertising or business cards should be placed upon the check form which may tend to confuse or blind the party handling the check or cause important details of the check to be obscured.

The size of the check or draft form should be from 5 inches to $3\frac{1}{2}$ inches wide by $8\frac{1}{2}$ inches long, and folded vouchers of whatever size should readily fold to the same dimensions and thus adapt themselves to all ordinary check files. Checks narrower, wider, or longer than these dimensions are objectionable.

Four of the most useful forms have been selected from the ones given, as follows:

New York City,________________19__ No.______

American Bankers Bank

100 Wall Street

Pay to the Order of______________________________$_______

______________________________________ Dollars

for______________________ ____________________

The above form is a common check form, with a single line indicating the distribution of the account settled.

Voucher No.________
Approved

____
Chairman

____________Committee
Countersigned and Approved

____
Secretary

____
President, First Vice-President, Chairman Executive Council

ITEMS

New York,________________19__ No.______

TREASURER

The American Bankers Association

FIDELITY TRUST COMPANY, TACOMA, WASH.

Pay to the Order of ____________________________

________________________Dollars $________

in full payment of Voucher No._________

THE AMERICAN BANKERS ASSOCIATION

PAYABLE AT
NATIONAL BANK OF COMMERCE IN NEW YORK
NEW YORK, N. Y. (23-A)

____
Secretary

The above is an excellent form for single voucher requiring the approval of several officials. In use by the American Bankers' Association.

FORM______

JOHN DOE & CO.
999 BEEKMAN STREET
NEW YORK

ADVERTISING OR
DISPLAY MATTER

ADDRESS OF PAYEE

STATEMENT OF ACCOUNT
DUPLICATE

VOUCHER
SERIES NUMBER

CHECK BELOW TO BE DETACHED BY PAYEE

NEW YORK

CHECK NO.

VOUCHER
SERIES NUMBER

PAY TO THE ORDER OF

$
DOLLARS

IN FULL PAYMENT OF ACCOUNT STATED IN VOUCHER OF CORRESPONDING NUMBER, DUPLICATE OF WHICH IS RENDERED HEREWITH

TO THE
AMERICAN BANKERS BANK
NEW YORK

JOHN DOE & COMPANY
BY________________

The above voucher check is correct in form for the use of any corporation or individual where considerable detail is required. It possesses the following advantages:

1. Negotiability.
2. A complete statement of account and settlement therefor, for the payee.
3. A complete copy of such statement and settlement, together with a distribution record, for the drawer.
4. A simple, yet fully identified, check or order upon the bank which is easily detached from the voucher proper.

Each party to the settlement receives all the information he needs and the whole voucher does admirably what it undertakes to do.

A carbon sheet should be used for tracing the copy; thus an absolute copy is obtained.

EAST AND WEST RAILROAD COMPANY

AUDITOR'S RECORD MONTH.................... NO.......

To...*Dr.*

For

CORRECT

AUTHORIZED AND APPROVED

SUPT.

APPROVED

GEN. MGR.

AUDITED

AUDR. DISB.

APPROVED FOR PAYMENT

COMPTROLLER.

Chicago, Ill.,..............................

Pay to the order of ....

Address { ....

....

________________*Dollars* ($______)

in settlement of above account.

EAST AND WEST RAILROAD COMPANY

TO THE AMERICAN BANKERS BANK
NEW YORK CITY

VOID IF DETACHED

....
TREASURER

The above is a folded form for Railroad use only and where it is impracticable to use a carbon copy. This may be modified to a single voucher or a double-folded voucher, according to the amount of information required.

Branch Accounts.

In the conduct of business, particularly that carried on by merchants or traders, it is often expedient to provide for branch establishments in order that local territory may be covered more effectively and economically than can be done from headquarters. Thus, a firm established in New York to carry on a wholesale trade in clothing may find it more advantageous to transact its business in the central part of the country from a local branch established in Chicago. The supplies of merchandise may, as is usually the case, be shipped from the warehouse in the home city, or they may, in part or in total, be purchased direct by the branch office.

There are varying degrees of independence in the conduct of a branch, depending upon the conditions peculiar to the enterprise. Thus, a branch may be merely a center for distributing merchandise, established to facilitate prompt deliveries, without the necessity for accounts other than such as would be necessary to keep a satisfactory record of stock. The selling would be carried on through salesmen employed and directed from the head office, which would determine the credits to be given customers, and make all collections.

The work of the branch may extend to the selling of goods and the collection of accounts, with or without the privilege of purchasing goods other than those supplied by headquarters, without an attempt to determine profit and loss outcome of the branch. In such a case, there would be no need in the branch books of classifying expenses and determining profit, all of which would be carried out in the home office books.

A still further amplification of the accounting of a branch establishment would be the keeping of such records as would permit of the determination of the profit and loss for the branch. For this purpose, it would be necessary to fix the value of merchandise supplied through the head office, which might be the price at which goods could be purchased in the market. It may be that the firm is a producer of goods and that such a price includes manufacturing profit, but if so, such a profit is made at the headquarters of the firm, and is not a profit for which the branch should take credit. Inasmuch as it is only a transfer of stock from warehouse to a branch, the advance over cost is an anticipated profit and should, to the extent of goods unsold by the branch, be held back from profit and loss, to be taken in later when the goods are sold. The ordinary bookkeeping record of expenses and losses should be kept, and adequate reserves for losses in the collection of accounts receivable should be made.

The plan of accounts is to record the advances of merchandise and money by the head office in a branch office account, as the capital invested in the branch, for which the head office receives credit in an account raised in the branch books. Thus, if values to the extent of $10,000 of merchandise and $2,000 in cash are supplied to the branch, the entry in the head office books would be:

BRANCH OFFICE	$12,000	
To PURCHASES		$10,000
" CASH		2,000

The entry to open the accounts of the branch would be the inverse, and would appear as follows:

MERCHANDISE ADVANCES	$10,000	
CASH	2,000	
To HOME OFFICE		$12,000

If the goods are all advanced through the head office the ordinary caption of **Purchases** would not properly describe the state of facts. Therefore, if an ordinary merchandise account is not used, the goods may be charged to an account under the caption **Merchandise Advances,** or any other suitable caption.

The accounting from this stage follows the ordinary lines, the accounts receivable or cash being charged, and sales credited, with the progress of the business. Salary and other expenses are charged to appropriate accounts. Further advances from the home establishment would be credited to the head office account. Inasmuch as goods are advanced and are converted into cash without further cost than the expenses of selling and management, it follows that cash receipts will greatly exceed cash payments under usual conditions.

A common procedure is to have all cash receipts deposited in a bank, subject only to check or draft, drawn from the head office. A fund is supplied to the branch on the Imprest basis, which may be held and used through a separate bank account, for the purpose of making payments on account of expenses. This is replenished from time to time upon statements of disbursements rendered to the home office by check of the home office, usually on the local bank, in which receipts are deposited.

A less satisfactory procedure is to maintain a local bank account under the control of the branch management, from which funds are remitted to the head office from time to time as conditions demand. Theoretically remittances or deposits could be charged to the Head Office account, although it is usual to hold such items in a special account until the close of the period, when the balance is charged to the Head Office

account. In fact, when the less frequent condition of remittances from the head office exists, they may be credited to the account instead of to the Head Office account, in order that the cash transactions with the head office may be disclosed in a single account.

In case of one or more bank accounts under the control of the branch, it is advisable to have the bank render a monthly detailed statement, if practicable, directly to the head office.

The information required by the home office will depend upon the circumstances of the case, varying from a complete weekly report of all transactions, including cash receipts and payments, and sales, to a monthly detailed report, or a monthly summary report, which may consist merely in the transmission of a trial balance, to a semi-annual or annual report, giving the results in detail only. It is customary to supply the home office with a duplicate sales record (invoices), and, in some cases, complete ledger accounts are maintained in the home office. A summary control, however, usually meets every requirement with less labor.

If the concern has a large number of branches, it may be justified in maintaining its own auditing staff, which will make an independent report to the home office. There will, in such case, be less necessity for a complete report of the transactions of each branch. In the absence of such a staff, the same result may be obtained by the employment of accountants, who will certify monthly, or at less frequent intervals, to the state of facts existing.

At the end of the accounting period, there is the same necessity for the adjustments of all accounts that exist in an independent accounting system, for the results must be carried into the accounts of the head office for the purpose of determining the aggregate profit and loss outcome, in which the transactions of the branch are constituent elements. Therefore, it is necessary to make an inventory and accrue all expenses and profits. The profit and loss items may be collected in a profit and loss account, if it is desirable, on the branch books, to show this result; if it is not desirable, the items may be transferred, together with the balance of the deposit or remittance account, directly to the head office account, which will then be reduced to a statement of the exact amount of values invested in the branch enterprise by the head office.

Ledger Analysis.

The vital accounting record exists in the books of original entry and it is often necessary to establish the agreement of the Ledger with such original records. If the discrepancies are not numerous, they may

be located by calling back the postings, and corrected by entries made for that purpose. The ledger facts, when properly adjusted and brought to a state of equilibrium, may then be relied upon as the basis for the preparation of statements to present accounting facts.

The bookkeeping work is so inadequate in some cases that the agreement cannot be established in this way. Part of the original entry may be made in the Ledger itself, and the agreement of the balance may be rendered difficult by errors. In such a case, it may be necessary to undertake the laborious task of analyzing the ledger, by which it is brought to an agreement with the original record.

In order to understand the procedure, it is necessary to bear in mind that the ledger is an aggregation of accounts, which classify the facts recorded in the books of original entry, as to persons and subjects. The ordinary posting process is reversed and the items are carried back to an analysis sheet, ruled so as to show for each account the source of each item in the account. In this way, a statement is secured that balances and proves each account as the work progresses.

Thus, an account receivable may have items as follows:

Dr. JOHN DOE. Cr.

1902				1902			
Jan.	2	To Balance........	$300.00	Jan.	5	By Allowance....	$20.00
	2	" Merchandise...	1,000.00	Feb.	6	" Cash.........	970.20
	16	" " ...	500.00		6	" Discount.....	9.80
					13	" Bills Receivable	300.00
					28	" *Balance down* .	500.00
			$1,800.00				$1,800.00

The books of original entry, from which the foregoing was posted, were Journal, Cash Book, ruled for items of cash and discount, and Sales Book. A Purchase Book was also used, but no entries from it appear in the above. An analysis, therefore, could be made as follows:

Account	Date	Classification of Debit Entries						Classification of Credit Entries					
		Opening Dr. Balance	Cash Book		Sales	Journal	Closing Cr. Balance	Opening Cr. Balance	Cash Book		Purchase Book	Journal	Closing Dr. Balance
			Cash	Disct.					Cash	Disct.			
John Doe.........	1902 Jan. 2	$300.00			$1000								
	5											$20	
	16				500								
	Feb. 6								$970.20	$9.80			
	13											300	
	28												$500
Richard Roe......													
Etc., Etc.........													

The insertion of a date column with each money column is useful in that such an arrangement economizes in space. Thus, in the form given, the February items could have been placed in the space opposite that occupied by the January items. For the sake of simplicity in conveying an idea of the purpose of the analysis, one date column only is shown.

A ledger account, of course, can be made to balance by carrying the difference in, as was done in the ledger account shown. The manner in which an equilibrium is established in the foregoing analysis may be seen from the following:

Items in Classification of Debit Entries.		Items in Classification of Credit Entries.	
Balance at beginning...	300.00		20.00
	1,000.00		970.20
	500.00		9.80
			300.00
			$1,300.00
		Balance at Closing....	500.00
	$1,800.00		$1,800.00

Each account is treated in the analysis sheet in the same way, and the **Dr.** or **Cr.** balance of each is established. Each can be proved separately, or the analysis can be proved, as is usually the case, by pages. The totals of the columns, after the proof of a page, are carried forward to the succeeding page, so that the total debits and credits from each book of original entry are shown.

The process will not necessarily result in a trial balance, unless the ledger is in balance. If a total shown on the analysis to have originated in a book of original entry does not agree with the total column of such book, there is evidence of error.

Thus, the total Journal credits shown in the analysis might differ from a summation of credits in the Journal itself, which would render necessary a search for the discrepancy. In this way, errors are localized to a particular part of the record. A discrepancy between the totals of the two Journal columns shown in the analysis, too, would call for an explanation. The cash receipts and payments, as disclosed by the bank and other cash records, can be compared with the cash entries known to have been carried to the ledger, as shown in the analysis. It will be seen that the entire record is dissected and spread out in a way to facilitate verification.

The complete analysis of a ledger with numerous accounts is a considerable task, and is usually a last resort. The analysis of the most important accounts, however, is of common occurrence, and may proceed along the foregoing lines or in the way best adapted to the needs of the case.

Special Account Classification.

The analyses of accounts are made to classify elements and set them forth for the purpose of adjustments and reports. Thus, if it were desirable to analyze an expense account, it could be done on an analysis sheet ruled with columns for date, items, total charged, and distribution columns for the classes into which the charges are to be carried.

An analysis of a Bills Payable Account is a more complicated example. It may be made in the following form:

BILLS PAYABLE ANALYSIS.

Payee	Amount	Rate	Due	Settled	
				Date	Manner
(List all bills given)					Paid or Renewed

The unsettled bills would be disclosed by the unchecked items in the "Settled" column. If desirable, rulings could be provided to the right to show items due within 30 days, due from 30 to 60 days, etc., but this is usually done as a recapitulation after the analysis. The ruling, in fact, is made to meet the conditions found to exist.

This view of analysis is given to reinforce the principles of constructive accounting, by which the original records are planned to provide, as nearly as possible, all necessary classifications.

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LECTURE IV.

CONSTRUCTIVE ACCOUNTING.

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PACE STANDARDIZED COURSES IN ACCOUNTANCY, BUSINESS ADMINISTRATION
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LECTURE IV.

CONSTRUCTIVE ACCOUNTING.

In General.

A knowledge of specific financial facts and a comprehension of the effect of the aggregate of financial transactions are essential to successful management. In order intelligently to place a selling price upon an article, the specific financial fact of its cost must be known. In order to guide the enterprise in succeeding business periods, the effect of financial transactions must be known by means of a display of costs and selling price in opposition.

In a small enterprise in which the transactions are few, the mind may retain sufficient facts and financial effects for successful management. In this way, the affairs of petty traders are often managed without the aid of scientific accounting expedients.

In larger concerns, where the transactions are more numerous, the mind fails to grasp the significance of the transactions without the use of expedients for classifying the facts in a logical manner, and for presenting, in form suitable for ready comprehension, the effects of transactions. The failure of many men, successful in the management of small concerns, to conduct successfully the affairs of larger enterprises, is due to their inability to secure facts and to comprehend their meaning.

Accounting has for its principal object, both in large and in small enterprises, the securement and the presentation of information necessary to an efficient control and management. There are two distinct steps

in the process, the first of which, already considered, is the designing and the use of records for the collection and the classification of the facts that contribute to the results. The second step is the construction and the use of statements that will bring to the mind a complete understanding of the recorded facts.

The two basic statements are the Balance Sheet, to show the **state** of the enterprise, that is, financial facts, at a certain time; and the Profit & Loss Account, in one form or another, to show the **progress** of the enterprise or the profit or loss effect of financial transactions.

This Lecture will deal particularly with the latter statement, not only in its final form, prepared to accompany a statement of financial condition, but in its incomplete and estimated form, as used throughout the accounting period as an aid to management.

Elements of Income.

In enterprises conducted for profit, a certain service is rendered, the return for which, it is expected, will be in excess of all the costs incurred in rendering the service. In this way, the invested capital is kept intact, and a profit is secured, the latter being the compensation for the capital used and the effort expended. In case the returns are less than the cost, an impairment of capital, to the extent of the difference, results; and unless there is reason to believe that the enterprise can be brought to a point where the returns will exceed the cost, recourse should be had to a realization and liquidation, to prevent a further wasting of capital.

The statistical record of nominal elements is made, in order to have available the reasons for income results. They are displayed in the form of a Profit & Loss, or Income, Account, and their usefulness will depend upon the classification of returns and costs. The nominal elements in such a statement record two distinct things, viz.:

1. Service rendered, for which a gross return is received, shown by credit balances;

2. Costs of the service, which are an offset to gross returns, shown by debit balances.

The first measures the gross returns, while the second measures the cost of obtaining such returns.

Gross Returns.

The service rendered may be any one, or several, of a great number of things. For example, the service may be trading or merchandising, by which sales of goods are made to customers; it may be the insuring of

goods, for a certain amount, known as a premium, against loss by fire or otherwise; or it may be the transportation of goods for tolls or charges. The measure of service would be, in the case of the trading concern, the sales; in the case of the insurance company, it would be the income from premiums; and in the case of the transportation company, it would be the earnings. In each instance the business transacted is measured by the gross return. Throughout all business, the gross return measures the result of the selling effort, and it supplies a ready and valuable means of determining facts in relation to the extension or the decrease of the service.

As an aid to management, the gross results should be known and displayed at frequent intervals throughout the accounting period, as well as in the aggregate at the end of the period. Gross returns, whether received as sales, earnings, or in other forms, can be shown conveniently at short intervals, and provide a valuable index to the volume of business and the efficiency of the selling staff.

The intervals for which facts can be displayed vary from a day to a year. As a general principle, the greater the number and the smaller the size of the transactions, the closer the gross results can be followed. For example, the gross earnings of a street railway, collected five cents at a time, but fairly constant in flow, provide a satisfactory daily display of gross results. The form should provide for a comparison of the result with some previous day. A ship-building company, on the contrary, may take but a few contracts a year, in which case a daily record of gross business received would convey but little information. Between the extremes are found undertakings whose gross service, according to their particular circumstances, can best be measured by statements covering weeks or months.

The statement of gross results is easier to make than a statement of the costs and expenses chargeable against such results. The sales in a department store, for example, may be determined definitely at the close of the day's business, while the determination of the costs of the day's business would involve the apportionment of monthly charges, which in some cases would have to be estimated. In railroad accounting, as another example, daily gross earnings are shown, while net earnings are determined but once a month.

Cost.

Gross returns in themselves are not the object of a business. If the gross return, or selling price, of an article is \$3.00, and the costs are \$1.50 for the article itself, \$1.00 for selling effort, and \$1.00 for administrative expenses, there is, it is true, a gross return, and even a gross profit, but

the net result is a loss, or impairment, of capital. In the end the returns must exceed the costs, to achieve the object of a profit enterprise.

The relation of cost to return should be determined as often and in as much detail as practicable. In railroad companies, as before explained, the net results are determined once a month. In addition to the yearly statement of income, a monthly statement is therefore available which is of use in directing the year's operations. The results are shown in great detail, and by means of comparison with the preceding month and comparison with the same month for the preceding year, inefficiencies are defined for managerial attention.

The circumstances of the case should determine the frequency of intra-period rests. For example, once a month is often enough to prepare net statements for a city hotel, but similar statements for a summer hotel should be prepared on a weekly basis, owing to the short season, extending not over more than eight or ten weeks. Statements prepared on a monthly basis in the case of the summer hotel would be of little service in aiding the management to avoid an unfavorable outcome, for the season would be well along before the results would be in hand for management purposes.

In trading concerns in which it is necessary to take a physical inventory, statements of net results prepared annually or semi-annually are usually sufficient.

Much is dependent upon the classification of the statements. A full consideration of classification, including detail and form, will now be undertaken.

Illustrations.

Statements to disclose income results may be prepared in the account form, with debits and credits in opposition, which is a modified ledger account form; or they may be prepared in **running** or **report** form, the net results being obtained by subtraction. The latter form is coming into common use, and is justified on the ground that it is less technical than the account form, and, therefore, the accounting facts are more readily comprehended by those not technically trained. An additional reason for the use of the report form is that it can be used more conveniently in printing and in the typewritten reports that are now generally used to present such facts.

The report form will be used to show the uses of classification in recording and presenting facts as to income.

The simplest condition in the accounts of a trading concern would be the subtraction from an ascertained amount of Gross Profit, of the total Expense incurred, thus:

PROFIT & LOSS ACCOUNT.

Gross Profit (balance of Merchandise Account)	$221,500
Expenses	176,300
Net Profit	$45,200

The elements that enter into Gross Profit may be of value in determining the relation of cost price to selling price, and this could be determined by an analysis, preferably by means of accounts raised during the accounting period, or of the Merchandise Account. The classification of expenses might also be an aid to management. The information could be presented in this way:

TRADING AND PROFIT & LOSS ACCOUNT.

For Period..................

Sales (net)		$664,500
Inventory, at beginning	$ 87,000	
Purchases (net)	425,000	
	$512,000	
Less Inventory, at close	69,000	
Cost of Goods sold		443,000
Gross Profit ($33\frac{1}{3}\%$ on Sales)		$221,500
Expenses:		
Selling	$98,000	
Administrative	63,000	
Capital	15,300	176,300
Net Profit		$45,200

From the foregoing statement, a fairly complete idea of the trading that gave a gross profit of $221,500 may be obtained, as well as a general classification of the expenses. The expense amounts are large, even as classified, and a further classification is desirable. The statement, therefore, will be recast, the returns and allowances will be shown in the trading division and expenses will be analyzed more nearly as would be the case in practice.

BLANK & BLANK.

Trading and Profit & Loss Account for Year Ending December 31, 1902.

TRADING.

Sales			$667,000	
Less:				
Returns		$1,800		
Allowances		700	2,500	
Net Sales				$664,500
Inventory, January 1, 1902			$87,000	
Purchases		$426,500		
Less:				
Returns		1,500	425,000	
Less:			$512,000	
Inventory, December 31, 1902			69,000	
Cost of Goods Sold				443,000
Gross Profit, carried to Profit & Loss Account below, being $33\frac{1}{3}\%$ on Net Sales				$221,500

PROFIT & LOSS.

Gross Profit on Trading				$221,500
Selling Expense:				
Salaries		$52,500		
Entertainment		3,500		
Publicity:				
Magazine	$31,500			
Newspaper	7,500			
Circular	3,000	42,000	$98,000	
Administrative Expense:				
Salaries:				
Managing	$28,000			
Clerks	29,200	$57,200		
Stationery		2,200		
Printing		1,100		
Miscellaneous		2,500	63,000	
Capital Expense:				
Discounts		$4,100		
Rent		6,000		
Interest		800		
Reserve for Bad Debts		1,100		
Insurance		1,800		
Taxes		1,500	15,300	
Total Expenses				$176,300
Net Profit				$45,200

Classification of Elements.

The greater usefulness of the statement last given over preceding statements is obvious. The elements stand out in a way that aids in an understanding of the causes that have brought about the net result.

In the first statement, the gross profit was shown, with no attempt whatever to present the elements of trading. In the second statement, the sales and purchases were shown by net amounts, but the information as to gross trading was in other respects fully presented. In the third statement, the gross amounts of sales and purchases were shown, and the returns and allowances deducted therefrom, presenting clearly features that might be of great importance in disclosing certain elements that contribute to the outcome.

In the part of the statement that presents expenditures, it will be noted that the general classifications of Selling, Administrative and Capital have been amplified by details, showing the classes of expenditure in each. Thus, Selling Expense with a total of $98,000 is shown to have been divided into Salaries, Entertainment and Publicity, and the latter item is subdivided into three classes. If the entire amount of $98,000 seems large in comparison with the estimates, or with the expenditures of a previous year, the causes of the increase could be traced. It would be of importance to know whether it was incurred in salaries or in publicity, not alone as an index to the past record, but on account of its importance as a guide for the future. For example, if the Publicity expenditure had largely increased with no appreciable increase in gross sales, the management might be led to reduce the expenditure for that item in the succeeding accounting period. Classification of this division in a large undertaking might be made much finer, and the division shown is for illustrative purposes only.

In a general way, the comments in regard to Selling Expense apply to Administrative Expense. The details that enter into this large amount of expenditure are of importance, in order that such expenditures may be controlled and that they may be made to produce their full value to the business.

The third division, designated Capital Expense, is one that, perhaps, calls for more comment than either of the other two classifications. The attempt is made to group under this division those expenditures that are incurred on account of the conditions that exist in regard to capital.

Thus, there is a debit balance to discounts which measures a net abatement of amounts due the concern, given in consideration of cash settlements. For example, a bill for $500, settled before its due date under 1 per cent. discount, would produce but $495. There may be in

the Discount account the credits that arise from the settlement of liabilities under a discount or abatement, allowed for cash settlement. The object, in the case of the discounts given, is to secure cash before it is due, and in the case of the discounts received, the payment is made, because there is sufficient cash on hand to make available the saving or abatement. These two conditions, theoretically, flow respectively, from a small or insufficient amount of capital, or an abundance of capital, and the amounts are not apt to vary on account of trading conditions. The inclusion of such items, therefore, in Selling Expense, might distort that division by bringing into it an element that would fluctuate quite regardless of the conditions that exist in the selling department of the enterprise.

In case discounts taken were kept in a distinct account, with a credit balance, it would, in many cases, be advisable to deduct the amount thereof from the total of Capital Expense, rather than carry it to the Trading Division as income. In theory, it is an offset to Capital Expense, and is never actually received as income.

The item of Rent is handled, in theory, upon the same basis. Thus, if capital sufficient to supply all real estate facilities were provided, the item of rent would not exist.

The item of Interest, is, in theory, the same as Discounts, and arises through a scarcity, or an abundance, of capital, and calls for no special comment.

Reserve for Bad Debts is included in this division because it is a loss that is expected in the realization of assets. It might seem, inasmuch as the accounts receivable are estimated to produce an amount less than their face, that the shrink should be deducted from the amount of sales, or included as a selling expense. The credits upon which the sales are based are passed upon by the credit department. To deduct subsequent losses in realization, which might, in some cases, be due to financial stringencies, for which the selling department is in no way responsible, would seriously impair the statistical value that is secured in the record of sales. It is, in the first place, an estimated amount and in view of this, care is taken to insure a liberal provision. This would necessitate adjustments to correct the estimates, which would bring into the matter a fluctuating element that is best handled through some special classification that does not impair the statistical value of the other divisions.

Insurance expenditure is incurred for the purpose of safeguarding the capital, and the item of Taxes is an imposition by the Government on account of the investment of capital, so that both items may properly be carried into the classification of Capital Expense.

The summation of the totals of the three classifications produces

the amount, \$176,300, to be deducted from the gross profit, \$221,500, which leaves the amount of net profit shown in the preceding statement, namely, \$45,200.

Miscellaneous Elements.

There are numerous items not included in the foregoing statement that may occur in practice. Thus, it is not unusual to find an expenditure on account of duty or freight on goods received. Such items would be shown in the Trading statement as an addition to the purchases, inasmuch as the cost to the concern is the total amount which accrues up to the time the goods are received in the stores or warehouses. The object is not to show the cost of goods at Liverpool, or at Manila, but delivered to the concern and available for its uses.

Freight paid on goods shipped out, in the majority of cases, would be charged to the customer, but in case the sale were made on the basis that the goods be delivered at the destination, the freight thus paid would, in theory, be a deduction from returns. It would, perhaps, be better handled in this way than carried as a charge to Selling Expense, inasmuch as it is strictly a transportation, rather than a selling item.

Trade Discount, that is, a deduction from a nominal list price, whether allowed on goods bought or goods sold, ordinarily is not entered in the accounts in any manner. If such items are entered, trade discounts on goods purchased should be deducted from purchases, and trade discounts on goods sold should be deducted from sales.

Sufficient items are given to show the application of the principles. In practice, the specific instances are innumerable, but the governing principles are few.

General Principles.

The divisions into which expenditures are classified will vary according to the requirements of the particular enterprise. It is desired to lay emphasis upon the fact that such divisions should be made for a concern only after an investigation by the accountant that will enable him to pass judgment upon the specified conditions. The general heads might be more numerous and the detailed classifications of each might extend much further.

As a general proposition, a large volume of transactions is necessary, in order to render desirable an extended classification, and in the accounts of small traders any division further than Trading and general Profit & Loss is likely to be undesirable. With these two general divisions, and with possibly a third division in which any extraordinary item of profit or loss not arising from trading or operation is included, all the facts essen-

tial to an understanding of the progress of the concern can be obtained. The classification, once made, should be maintained strictly, in order that each classification may have a statistical value through comparison with previous accounting periods. In the Trading division no items should be included except those that fluctuate as the volume of business fluctuates, for items that are fixed in their nature, irrespective of the volume of business, would tend to distort the gross result of trading, for the presentation of which the Trading Account is created.

In the handling of accounts of small traders, and in the solution of propositions in which the facts are imperfectly stated and the classifications are not made to a fine degree, the attempt to classify into Selling Expense, Administrative Expense, Capital Expense, etc., is to be avoided. Resort should then be had to the Trading and Profit & Loss Account arranged in two or three divisions, as stated, with the disposition of the net profit shown after the determination of trading and profit and loss results.

Attention is called to the necessity for records constructed for the purpose of making the necessary classification as the bookkeeping entries are made throughout the accounting period. Without such provision, classified statements can be prepared only by work that amounts to a restating of the entire bookkeeping record, which the accountant is often called upon to do, although it is an expensive process. The close relation between the designing of records and the presentation of accounting facts will, therefore, be apparent.

Percentages.

The use of percentages in stating trading results, and in calculating profits, both gross and net, has the advantage of conveying to the mind relative facts more fully than is possible by the presentation of specific sums.

In the preceding statements, the gross profit, calculated on selling price, as is the practice in the retail trade, is shown to be $33\frac{1}{3}$ per cent., the figures purposely being worked out to produce a percentage that would be convenient to illustrate the principles involved. In case an article is sold for one-half, or 50 per cent., more than it costs, the trader places upon it the selling price and then considers the gross profit to be one-third, or $33\frac{1}{3}$ per cent., of the selling price. Thus, an article bought for $500 is marked for sale at $750, or an increase of 50 per cent., and the trader considers that he is selling upon a gross profit basis of $33\frac{1}{3}$ per cent. In case of stable conditions in the trade, the prices permit of a fairly uniform basis of gross profit, and it can be determined on any specific article by mere multiplication of the selling price by the rate of profit. For example, $33\frac{1}{3}$ per cent. of $750 is $250, the gross profit, which, deducted from the selling price, $750, will leave $500, the cost price.

The principles apply to the aggregate transactions, so that a rate of gross profit may be determined. In the accounts common to traders, the actual cost of sales is not known except at the time a physical inventory is taken. Between the times of taking physical inventories, if the approximate percentage of gross profit on sales is known, the cost of the goods sold may be determined by multiplying the amount of sales by the rate of profit, and deducting the amount obtained by such multiplication from the selling price. The amount of cost of goods sold deducted from the amount of purchases, including opening inventory, will leave an amount that is the approximate inventory of merchandise on hand. This is a convenient expedient for the purpose of making estimates of trading results from time to time during the accounting period, and in case of the destruction of the stock on hand by fire or otherwise, the amount of goods destroyed may be approximated in this way for the purpose of insurance adjustments.

There is a case on record in Great Britain in which auditors were held in damages for failure to detect fraud in inventory that would have been discovered, had the inventory been tested upon the basis that has been explained.

The advantage in calculating percentages upon the basis of sales lies largely in its convenience and in the matter of estimated inventory. The soundness of the method depends upon the approach to accuracy of the rate that is used. The selling prices are, in many instances, subject to adjustment before actual sales are made and are controlled in the long run by the economic law of supply and demand, rather than by the action of traders in arbitrarily fixing prices that exceed the cost prices by a certain percentage. It is only when these variations can be averaged and brought to a close approximation of the actual percentage of gross profit that the method of determining inventory and trading results is of value.

In certain undertakings, the calculation of profits upon cost figures produces better results because the costs are definite and, once incurred, are not subject to changes. In the retail trade, however, the calculations are made upon the selling price, and the traders and their associates think and deal in percentages upon selling prices, so that a condition exists that renders desirable the presentation of results upon the selling basis.

There are certain dangers that come from this method that should be held in mind by the accountant. Thus, when a trader speaks of a gross profit or a net profit, it is usually upon the sales, which are sometimes known as the turnover, and not upon the investment. A 10 per cent. net profit upon turnover might be a 40 per cent. profit as the term is used in the ordinary sense of a return upon investment, in case that the turn-

over of the business is four times as great as the amount of capital employed.

Another condition that may lead to an error is the use of a percentage to measure the expenses, which is calculated upon a selling price that is greater than the actual price realized. Thus, in the case before given in which an article was purchased for \$500 and sold for \$750, it may be assumed that the expenses were 20 per cent. of the selling price, in which case the elements of the transaction would be disclosed as follows:

Selling Price	100%	\$750
Cost of Article	66⅔%	\$500
Expense	20 %	150
Net Profit	13⅓%	100
	100 %	\$750

In case trading is being done upon the theory that the expenses amount to 20 per cent., based upon selling price, a reduction in selling price will necessarily increase the percentage thereof that must be calculated as expense. In order that this condition may be more fully appreciated, the following tabulation is given, showing the percentages applicable to different selling prices, assuming that the expenses remain the same amount:

	\$750 *Basis*	\$700 *Basis*	\$650 *Basis*	\$600 *Basis*
Cost of Article (\$500)	66.67%	71.43%	76.92%	83.34%
Expenses (\$150)	20.00%	21.43%	23.08%	25.00%
			100.00%	108.34%
Net Profit	13.33%	7.14%	.00%	8.34%(loss)
	100.00%	100.00%	100.00%	100.00%

In case of aggregate transactions, if the prices are held up to the required point, the estimated percentage of expenses may be used with a fair assurance of approximate accuracy, but the principle given that reductions below such prices increase the percentage should be borne in mind.

Intermediate Theory and Practice of Accounts.

APPLIED ECONOMICS AND ORGANIZATION.

By HOMER ST. CLAIR PACE, C. P. A. (N. Y.)

LECTURE V.

PARTNERSHIP.

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LECTURE V.

PARTNERSHIP.

In General.

The relation, known as **partnership,** created by the association of the capital and effort of individuals, furnishes a common and useful form of business organization. The essential principles and accounting distinctions have been presented in previous lectures, and need not be restated.

A consideration of the rules that apply particularly to the keeping and stating of partnership accounts, as they have been developed by usage and judicial decisions will, however, be of use to the student, and, as an aid thereto, the application of the rules and principles to numerous states of fact will be undertaken.

General Provisions.

It has been repeatedly held that where members of a firm have access to the books of account and opportunity to know how the accounts are kept the presumption is that they do know, and the firm accounts kept by the firm's bookkeeper are therefore competent evidence between the parties. Entries made in partnership books after the dissolution of the firm have been held not to be of themselves *prima facie* evidence against the partners.

It has been held that the annual adjustment of the books of a firm, in the absence of fraud or mistake, binds the partners.

It is competent for the representatives of a deceased partner and the survivors to adjust and settle, by agreement between themselves, the partnership affairs, without an accounting or resort to legal proceedings. Such settlement, in the absence of fraud, is binding upon the parties

to it, subject to be opened for the correction of errors or mistakes, in accordance with the practice and principles of courts of equity.

In general, a partner is not entitled to charge his copartners for services rendered in the management of partnership property or business unless upon special agreement to that effect. A managing partner is not entitled to salary in the absence of an agreement to pay it, and one partner cannot charge the firm with commissions on sales in the business without such an express agreement.

From an accounting viewpoint, in the determination of net profit, salaries to partners are not ordinary costs or expenses, but advances against profits. The line between that which a partner "earns" as a salaried man, and that which he receives as a proprietor, is arbitrary, and should not be allowed to affect the showing of the net trading results. It may, of course, be called an expense to give effect to partners' agreements *inter se*, but the real accounting effect of such a procedure is an advance against profits.

It is the duty of a surviving partner to wind up the affairs of the partnership and to account for, and pay over, to the personal representatives of the deceased partner his share of the partnership effects.

If, by the continuation of the business, the assets and stock of the old firm have become mingled with new stock and its identity lost, the court will impress the equitable lien of the representatives of the deceased upon the whole of the new stock except as against a *bona fide* purchaser, or a party having acquired a specific lien, and such equitable lien will be enforced to the exclusion of the individual creditors of the surviving partner.

On the death of a partner, the survivor, for all practical purposes, takes the legal title to the partnership property and the place of the firm in respect to its assets and liabilities, and is vested with the possession and management of the property for the purpose of closing up its affairs. And the primary liability to pay the firm debts is that of the survivor. The remedy of a creditor at large of the partnership is against him alone unless he is insolvent. And in that event, or when the legal remedy has been unsuccessfully exhausted against the survivor, the creditors may proceed in equity against the representatives of the deceased member of the firm and his estate. The burden is upon the creditor to establish the facts which afford the right so to proceed.

Upon the death of one partner the surviving members of the firm become the legal owners of its assets by virtue of their survivorship, and have the exclusive right to sell, mortgage and dispose of them in the performance of their duty in closing up the affairs of the partnership and

can do so in the manner they deem best for the interest of those concerned. The representatives of the deceased partner have no legal interest in such assets, and no legal right to interfere in their administration, so long as the survivor is prosecuting the business of closing up the estate and applying its proceeds in the payment of firm debts. The survivors do not take such assets as trustees, but, as survivors, hold the legal title subject to such equitable rights as the representatives have in the due application of the proceeds. They may therefore, require the application of the assets to the payment of partnership debts, but the time, manner and mode of doing so are a part of the administration of the estate which is under the exclusive control of the survivors.

It has been held that a surviving partner may in good faith borrow money for the express purpose of paying debts of the firm. A surviving partner cannot take the property of the firm to himself at an estimated value, without consent of the representatives. He is bound to sell it to the best advantage.

Where, upon death of a member of an insolvent firm, the surviving copartner, who was solvent, was obliged to pay the firm debts out of his own property, and the separate estate of the decedent was insufficient for payment of all his debts, held, that the balance due from the decedent's estate to the surviving copartner, on account of the partnership transactions, must be paid ratably with other debts of the same class.

The law imposes upon the surviving partner, as an incident to the contract of partnership, the duty of collecting the assets and winding up the business of the firm, and allows him no commissions for its performance, unless specially provided for by agreement.

In the absence of an agreement, express or implied, that the surviving partner shall be paid for winding up the dissolved partnership, as in the case of the continuance of the partnership business with an interest in the profits to the representatives of a deceased partner, such surviving partner is not entitled to compensation for such services, and the same rule applies to the liquidating partner on a voluntary dissolution of the firm.

On dissolution by one partner becoming insolvent, the remaining partner has not a right, as a matter of course, to close up the business as would be the case with a surviving partner. The copartner has a right to demand the appointment of a receiver. But the solvent partner ought to be appointed receiver if he will give security necessary, and his capacity and integrity are unquestioned.

Upon dissolution of partnership between S. and P., it was provided

that S. should close the concern, and, after paying all debts, take to his own account, from assets or effects of the firm, an amount sufficient to equalize the accounts of the partners, P. being indebted to the firm. The assets were supposed to pay the debts and equalize the accounts, but this proved not to be the case. Held, that P. was not discharged from personal liability to S. for deficiency of effects.

A retiring partner, who guarantees to pay one-half of the amount of notes and accounts due the firm if they prove to be uncollectible, is liable therefor if the debtors are not of financial ability to pay, though the liquidating partner has not recovered judgment and issued execution.

The out-going partner, engaging to pay one-half of any outstanding accounts, "not collected or collectible," to the continuing partner, is bound to make payment on an account placed in the hands of an attorney for collection, and which he did not succeed in having satisfied within five months after it matured, though no action was brought.

Where a retiring partner transfers his interest in the partnership effects to an incoming partner, the new firm holds the partnership property charged with a trust for the payment of the old firm's debts, and the old partners cannot enforce contribution from the retiring partner for the payment of such debts, without showing that the partnership assets have been applied to and were insufficient to pay the same, since so far as those assets are sufficient to pay the debts the retiring partner, as between himself and his old partners, is a mere surety. Hence, a partner who had individually acquired one of the old firm's notes cannot hold the retiring partner thereon unless the firm assets were insufficient to pay it.

Initial Entries and Adjustments.

The usual and uncomplicated condition at the creation of a partnership, is the contribution, by the respective partners, of assets of agreed values. The amount of the agreed value of the assets contributed by a partner **as capital** is credited to his capital account.

The value placed upon certain assets, contributed to be realized for partnership purposes, may be tentative, or provisional, pending such realization. Thus, accounts receivable amounting to $12,500 may be contributed with the understanding that they will realize, after allowance for all discounts, bad debts, etc., the sum of $10,000, and that any deficit will be made up by the contributing partner. The agreement might also provide for an additional capital credit, in case of an excess realization, or, in fact, the value might be finally agreed to at $10,000, the partnership as a whole to receive the effect of the realization.

In case of a tentative valuation, subject to adjustment, the assets would be set up at their face value and a reserve created for the amount

by which the face value exceeds the estimated realizable value. Losses in realization would be charged to the reserve. In case the assets realize the exact estimate, the reserve will be exactly extinguished. In case of an excess realization, the reserve will appear with a credit balance, and in case of an under realization, it will appear with a debit balance. The balance will be treated in accordance with the particular agreement.

As an example, A and B form a partnership, profits and losses to be shared one-third to A and two-thirds to B, A contributing real estate of the agreed value of $25,000 and B contributing $2,000 in cash and the Good-will and accounts receivable of a business. The accounts receivable amounted to $18,000, which B guaranteed would realize at least $16,000, and it was agreed that the Good-will should be valued at an amount sufficient to bring B's capital to an amount equal to A's capital. The accounts receivable realized $16,500. The entries necessary to carry the transactions into the books would be:

A & B.

Partnership formed by A and B this 2nd day of January, 1902, for carrying on trading business, profits and losses to be shared one-third to A and two-thirds to B, capital being contributed as under:		
SUNDRIES To SUNDRIES		
REAL ESTATE (description)	$25,000	
A, Capital		$25,000
For capital contributed.		
ACCOUNTS RECEIVABLE	18,000	
CASH	2,000	
GOOD-WILL	7,000	
RESERVE FOR ACCOUNTS RECEIVABLE		2,000
B, Capital		25,000
For capital contributed.		
	$52,000	$52,000

CASH	$16,500	
To ACCOUNTS RECEIVABLE		$16,500
For realization.		

RESERVE FOR ACCOUNTS RECEIVABLE	2,000	
To ACCOUNTS RECEIVABLE		1,500
For losses in realization.		
" GOOD-WILL		500
For excess above estimated realization, written off.		

In case of the accounts receivable realizing less than $16,000, B would have been obligated to bring into the partnership the amount of the shortage, so that, at the outset, it is known that B, through accounts or contributions, will bring in $18,000. The difference between the $18,000 and the amount contributed by A, $25,000, being $7,000, is the tentative amount at which the Good-will should be carried in. The accounts receivable produced $500 in excess of the estimate, so that the value of Good-will was overstated to that amount.

It should be noted that there was no agreement as to the value of the accounts. Had it been fixed at $16,000, the agreed value of the Good-will would have been $7,000, and the $500 would have been a firm profit, to be apportioned as any other profit, one third to A and two-thirds to B. In this case the Balance Sheet would have shown.

Balance Sheet of A & B as at..........

Real Estate	$25,000	A, Capital	$25,166.67
Cash	18,500	B, Capital	25,333.33
Good-will	7,000		
	$50,500		$50,500.00

In comparison with the foregoing, the Balance Sheet, under the actual conditions, would have shown:

Balance Sheet of A & B as at..........

Real Estate	$25,000	A, Capital	$25,000
Cash	18,500	B, Capital	25,000
Good-will	6,500		
	$50,000		$50,000

Under the agreement, therefore, the better the results of realization, above the amount guaranteed by B, the less he receives, nominally, for his Good-will, although the substitution of cash for Good-will undoubtedly strengthens the financial position of the firm and his own interest. The actual value of the Good-will is not lessened in the slightest by success in collections.

The division of the $500 as a profit would have been better for B, had it been possible. The balances of the capital accounts measure the respective proportionate interests of the partners in the partnership assets, and, while in the second balance sheet the interests are shown to be equal, in the first balance sheet B's interest is shown to be slightly in excess of A's, due to his preference in the division of profits.

It is necessary, in cases of this kind, to handle the contributed accounts receivable in such a way that a distinction may be made between

realization and trading transactions. For this purpose a separate ledger may be used for the accounts taken over, care being taken to see that receipts from customers are properly applied.

The discussion of further illustrations of opening entries and adjustments would lead to but one conclusion, namely, that the difficulty lies in the interpretation of the partnership agreement. In seeking for a reasonable interpretation the accountant should carry through the possible accounting processes, in order to study their respective effects. By the exclusion of interpretations that bring about improbable or absurd results, the field is narrowed and the reasonable accounting intent gathered.

Dissolution Adjustments.

The accountant is most often called upon to determine accounting facts at the time of dissolution. A typical example of the complications that may arise in the settlement of a small partnership is supplied by a proposition given in an examination. The facts, fortunately, were not in dispute and are clearly stated. The proposition follows:

S and T began business August 1, 1899, S investing $8,000 and T $5,000, gains and losses to be shared equally and no interest allowed on investments or charged on withdrawals. The firm was dissolved May 1, 1900. The books had been kept in a haphazard fashion but the partners agreed to the following statement which was submitted for settlement: net debit of S $2,100; net credit of T $3,500; cash on hand, $3,400; 10 shares bank stock (market value $1,100); expense debit $5,100; profit and loss debit $3,000; credit $500. The bank holds the firm's note for $2,000 on which there is accrued interest $60. Prepare a statement showing the settlement of the partnership affairs of the firm.

Inasmuch as the assets, liabilities and relative capital interests of the partners are known, a balancing statement may be produced, as a basis upon which to work, by the use of whatever nominal amount is necessary to effect the balance.

Thus, if X contributes $100 and Y $200 and the profits and losses are to be shared equally, and there remains only $100 of assets, a balancing statement can be made that states the facts, as follows:

Assets	$100	
X		$100
Y		200
	$100	$300
Balance (loss)	200	
	$300	$300

The loss carried one-half ($100) against each partner would exactly offset X's capital and leave the books thus:

Assets	$100	Y	$100

Upon the withdrawal of the assets in settlement of Y's interest, his account would be closed by a charge and assets would be credited to balance.

Again, had X and Y brought their accounts to a position where X had overdrawn by say $100 and Y had a credit balance of $400, and the condition as to assets and liabilities was that the concern possessed $100 and had no liabilities, a balancing statement could be prepared thus:

Assets	$100	
X	100	
Y		$400
	$200	$400
Balance (loss)	200	
	$400	$400

The loss, carried one-half to each, produces a debit to X of $200 and a credit to Y of $300. Y would be entitled to take the $100 and to collect $200 from X, who evidently drew out the $100 he contributed and $100 in addition, and who is also chargeable with one-half of the losses. Y evidently increased his contributions to $400, and after deducting his share of the losses, he is still entitled to the return of $300, as stated.

Therefore, the relative weight of capital contributions or deficiencies being established, and the assets and liabilities being known, a balancing statement may be prepared by carrying in assets and capital deficiencies as debits, and liabilities and capital contributions as credits, and a nominal amount to balance.

In case a portion of the nominal elements are known, but not all, such as are known are carried in and a nominal account is set up for whatever balance is necessary to secure the equilibrium.

Thus, in the S & T proposition, a balancing statement can be produced, as follows:

S	$2,100	
T		$3,500
Cash	3,400	
Bank Stock	1,100	
Expense	5,100	
Profit & Loss	3,000	500
Bills Payable		2,000
Accrued Interest		60
	$14,700	$6,060
Balance, Profit & Loss		8,640
	$14,700	$14,700

The nominal elements, including the balancing amount, may be collected in a Profit & Loss Account, thus:

Dr. PROFIT & LOSS ACCOUNT. Cr.

To Debit		$3,000	By Balance	$8,640
" Expense		5,100	" Credit	500
" S (half profit)	$520			
" T (half profit)	520	1,040		
		$9,140		$9,140

The Balance Sheet, after payment of the liabilities, would be as follows:

S & T.

Balance Sheet as at..........

Cash	$1,340	T	$4,020
Bank Stock	1,100		
S, Capital (deficiency)	1,580		
	$4,020		$4,020

In case T took over the assets on account of his capital interest the Balance Sheet would be:

S & T.

Balance Sheet as at..........

S, Capital (deficiency)	$1,580	T, Capital	$1,580

That is, S has drawn out all of his own capital and $1,580 contributed by T, so that he is indebted to T in that amount. If paid into the firm's accounts, Cash would first be debited and S credited, and then T would be debited and Cash credited to close the books.

For greater fullness, the capital accounts, as they would appear in the ledger, are given, as under:

Dr.		S.	Cr.
To Balance...............	$2,100	By Profit & Loss...........	$520
		" Balance................	1,580
	$2,100		$2,100
To Balance...............	$1,580		

Dr.		T.	Cr.
To Cash..................	$1,340	By Balance................	$3,500
" Bank Stock............	1,100	" Profit & Loss...........	520
	$2,440		
" Balance...............	1,580		
	$4,020		$4,020
		By Balance................	$1,580

The proposition can be worked on a single entry basis, although the double entry basis is to be preferred. However, to corroborate the solution and to present the resource and liability view of it, the single entry solution will be given.

		Total	S	T
Capital Contributions........................		$13,000	$8,000	$5,000
Withdrawals..................................		11,600	10,100	1,500
		$1,400	—$2,100	$3,500
Remaining Capital:				
Cash...........................	$3,400			
Bank Stock.....................	1,100			
	$4,500			
Less.				
Liabilities....................	2,060	2,440		
Net Profit, half to each...............		$1,040	520	520
			—$1,580	$4,020
Less Assets taken over by T:				
Cash...........................	$1,340			
Bank Stock.....................	1,100			2,440
			—$1,580	$1,580

The foregoing may be the "statement" the examiner had in mind. The only added information in this solution is afforded by the items of withdrawals, and this can not be accepted for anything more definite than the net results, as aggregate contributions and withdrawals would not necessarily show.

Distribution of Capital Losses.

In the distribution of profits and losses, no distinction is made between those that arise through trading and those that result from the realization of capital assets.

A partner's capital may be extinguished from either trading or capital losses and a deficit created that is made good from a copartner's contributions, although, as in the case of S and T, before given, the deficit may arise from excessive drawings.

After a full realization and liquidation, as an example, the following condition may be found to exist:

Doe & Roe, Balance Sheet as at..........

Cash	$4,800	Doe	$8,000
Losses	5,200	Roe	2,000
	$10,000		$10,000

In case the losses are divided equally, $2,600 would be chargeable to each of the partners, and this would bring about a condition as follows:

Doe & Roe, Balance sheet as at..........

Cash	$4,800	Doe	$5,400
Roe	600		
	$5,400		$5,400

The situation is that losses which were divisible equally have been incurred to an extent more than sufficient to extinguish Roe's capital contribution and they overlap upon the capital contribution of Doe. Therefore, Doe would be entitled to receive the remaining cash, $4,800, and to collect from Roe the balance of $600 necessary to return to Doe his capital as shown to exist after the adjustment of the losses.

A still more complicated condition would be the case of three partners, one capital account showing a deficit and the other two showing credits, and in which nothing could be collected from the partner with the deficit. The deficit, so far as the two responsible partners are concerned, is a loss, and should be borne in the proportion in which the profits

and losses were to be shared as between such partners. Thus, in the case of X, Y and Z, sharing profits and losses equally, the following condition existed:

X, Y & Z, Balance Sheet as at..........

Cash......	$7,200	X.....................	$4,000
Z....................	3,000	Y.....................	6,200
	$10,200		$10,200

Distributing the deficit of Z, which was uncollectible, equally between X and Y, the following statement results:

X, Y & Z, Balance Sheet as at..........

Cash..................	$7,200	X....................	$2,500
		Y.....................	4,700
	$7,200		$7,200

The capital accounts, as adjusted above, disclose the proportions in which the remaining cash would be divided between the partners, X and Y.

The adjustments of partnership interests under complicated conditions of this kind have given rise to many disputes and there are conflicting decisions. The foregoing, however, is the commonly accepted accounting view.

Interest.

The capital contributions of partners are often unequal in amount. Therefore, the partnership agreement may provide for an adjustment to be made upon an interest basis, so that, before the division of the profits in the agreed proportions, an equalization is made that overcomes the inequalities of varying capital contributions.

Such an adjustment, as commonly carried out, has no bearing whatever upon the matter of profit or loss, but is merely an adjustment of the capital interests.

Thus, A, B and C contributed respectively $10,000, $5,000 and $5,000, to a business. The profits and losses were to be shared equally and each partner was to be credited with 6 per cent. interest upon his capital. Irrespective of profit or loss, to carry into effect the interest provision, it would be necessary to credit each partner with 6 per cent. interest upon his capital and to divide among the partners the aggregate interest in the proportion in which profits and losses would have to be divided.

From this it will be seen that if capital is contributed in the same proportions as the profits or losses are to be shared, there would be no

need for a provision for interest upon capital. Thus, if the profits and losses in the case given were divisible respectively one-half to A, and one-fourth each to B and C, the interest procedure carried out and divided as to the debit in the proportion of one-half, one-fourth and one-fourth, respectively, the same result would be obtained. That is to say, the partnership interests would be exactly the same as though no calculation had been made.

In the actual case, however, in which the profits and losses are divisible one-third to each partner, A receives 6 per cent. upon $10,000, amounting to $600 and is chargeable with only two-thirds thereof, so that his capital is increased $200 by the operation and the capital accounts of B and C are each decreased by $100. In this way, an adjustment is made that compensates A for his extra contribution of capital.

The capital accounts would appear as under:

Dr.		A.	Cr.
To Profit & Loss..........	$400	By Capital................	$10,000
" Balance...............	10,200	" Interest on Capital, 6%.	600
	$10,600		$10,600
		By Balance...............	$10,200

Dr.		B.	Cr.
To Profit & Loss..........	$400	By Capital................	$5,000
" Balance...............	4,900	" Interest on Capital, 6%.	300
	$5,300		$5,300
		By Balance...	$4,900

Dr.		C.	Cr.
To Profit & Loss..........	$400	By Capital................	$5,000
" Balance...............	4,900	" Interest on Capital, 6%.	300
	$5,300		$5,300
		By Balance...............	$4,900

In the ordinary case of profit earned, the matter of crediting interest takes the form of an appropriation of profit prior to the ordinary profit division, but inasmuch as the adjustment would take place irrespective of the securement of a profit, it is apparent that, after all, the procedure amounts to a mere adjustment and re-statement of capital interests to

carry into effect the provision to compensate, upon an interest basis, for unequal contributions of capital.

In order to give full effect to equalization upon an interest basis it is necessary that interest should be charged upon drawings, so that the partner receives credit for the amount of capital that actually stands to his credit from time to time in the business. The interest may be calculated only upon an excess capital or charged upon a deficit. Thus, the agreement might provide that $10,000 of capital is to be contributed by each of two partners and that 6 per cent. interest is to be allowed on any excess capital or to be charged upon any deficit, that occurs.

The credit or debit is carried to the capital account affected and the balancing portion of the entry is carried to an adjustment account or through the profit and loss account, to be divided as are profits and losses.

The provisions that may be made for adjusting unequal contributions of capital or effort, either by the provision of so-called salaries, commissions, division of profit, etc., are innumerable, but they will be found to fall under the principles given.

It will be plain to the student at this stage that the accounting principles involved are of general application, and the difficulties that are likely to be found in partnership accounting arise in the interpretation of the partnership agreements.

Advanced Theory and Practice of Accounts.

ORGANIZATION AND FINANCE

By HOMER ST. CLAIR PACE, C. P. A.

CORPORATIONS—LECTURE I.

CORPORATE RECORDS.

Advanced Theory and Practice of Accounts.

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CORPORATIONS—LECTURE I.

CORPORATE RECORDS.

Proprietorship.

Three distinct forms of proprietorship are employed in the investment of capital and the organization and conduct of enterprises, viz.:

1. **Single Proprietorship,** in which an individual, known as a **sole trader,** invests part or all of his capital and controls the undertaking;

2. **Partnership,** the relation created by the association of two or more legally competent persons to carry on a lawful undertaking, in which they combine capital, skill or time, one or more of them, to achieve the purposes of the association;

3. **Corporate Proprietorship,** the aggregation of capital by the creation of an artificial being, as will be more fully explained later.

The form of single proprietorship is the simplest and the one to which recourse is ordinarily first had in the natural development of an enterprise.

The form of partnership is the outgrowth of the first form, through the economic desirability of combining capital and skill in the attainment of a mutual object. Thus, if the common object of A and B is to make a profit, to be attained through an undertaking in which both capital and skill can be advantageously employed, and A has skill but no capital, and B has capital but no skill, they can, by combining, produce more profit in the aggregate than would be possible if they should proceed independently.

A partnership labors under the necessity for a dissolution of the form of organization in the case of the death of a partner, which may jeopard the business and capital invested. Further, individual liability for all the obligations of the undertaking attaches to each partner, thus placing his capital not invested in the particular enterprise subject to its vicissitudes. These conditions apply equally to a sole trader, and render desirable the third form of proprietorship.

Corporate proprietorship permits of the aggregation of capital, in many cases without further liability than the capital contributed, thus

enabling persons with small amounts of capital to contribute with limited liability and without actively assuming the responsibilities of management. It insures a continuity of the enterprise that is in nearly all cases desirable, and in some cases, as in a railroad, indispensable. The method is, therefore, from an economic viewpoint, the natural development of the partnership form, as the latter was of the single proprietorship form.

The nature of the corporate form will be more fully apparent from the definitions and explanations to follow, although it is not intended, in this Lecture upon Theory of Accounts, to cover fully the legal principles involved.

Definitions.

A **corporation** may be defined as an artificial being created by law for certain specified purposes, composed of individuals united under a common name, the corporation being distinct from such individuals, so that it continues to exist notwithstanding changes in the individual members through death or otherwise. A corporation, for practically all purposes, is considered as a natural person.

For accounting purposes, corporations may be considered in two general classes, viz.:

1. **Public corporations,** organized for the purpose of government, such as a county or municipality.

2. **Private corporations,** comprising (a) **Stock corporations,** or those organized for the purpose of profit, such as a mercantile, manufacturing, banking or railway corporation; (b) **Non-stock corporations,** organized for purposes other than profit, such as a cemetery, library or religious corporation.

A stock corporation is defined to be a corporation having a capital stock divided into shares, and authorized by law to distribute to the holders thereof dividends or shares of the surplus profits of the corporation.

There are certain distinctions to be observed in stock corporations. They may be divided into:

1. **Public Service corporations,** or those rendering a public service for a private profit, with special powers or privileges, such as the right to condemn property, for the grant of which certain rights of supervision and control are reserved to the creating power. They are usually organized under a general law, applying especially to the organization of such corporations and are subject to special restrictions.

2. **Business corporations,** being the remainder of the stock corporations. These are subject to a further division in some states. For example, in New York, financial institutions, such as banks and trust companies, are incorporated under a law applying especially to them.

The great majority of the stock corporations, however, consist of those organized for the purpose of carrying on trading and manufacturing enterprises.

Organization.

The incorporation is usually effected under a state law, by the association of natural persons, known as **incorporators,** who execute a **certificate of incorporation,** in some states termed **articles of incorporation,** setting forth the name and object of the proposed corporation, its duration, principal place of business, names of its first directors, the amount of its capital stock and its division into equal parts, known as **shares,** and such other matters as may be desirable or as may be required by statute, the incorporators specifying opposite their signatures the number of shares for which they respectively subscribe. When the certificate of incorporation is filed and accepted, and all the formalities have been complied with, the corporation is fully organized.

The capital stock is divided into equal parts, known as **shares,** for the purpose of dividing the ownership of the capital. In New York, the shares cannot be less than $5, nor more than $100, each. Thus, if a corporation has an authorized and issued capital of $100,000 divided into shares of $100 each, there would be 1,000 shares of stock, issued in the names of the various proprietors, known as **stockholders,** according to their ownership.

Upon payment to the corporation of the par value of the shares subscribed by the original incorporators, **certificates of stock** are issued to the respective persons, certifying that the holder is the owner of a certain number of shares of the capital stock of the corporation. The stock certificates are signed by the proper officers of the corporation, and, in New York, must be sealed with the corporate seal.

The ordinary form of stock certificate is as follows:

Incorporated under the Laws of the State of New York
THE JOHN F. HOWARD COMPANY
Capital Stock, $100,000

THIS CERTIFIES that.................................is the owner of
.............................Shares of the Capital Stock of
THE JOHN F. HOWARD COMPANY, full paid and non-assessable, transferable only on the books of the Corporation by the holder hereof in person or by Attorney, upon surrender of this Certificate properly endorsed.

(SEAL)

IN WITNESS WHEREOF, the said Corporation has caused this Certificate to be signed by its duly authorized officers and to be sealed with the Seal of the Corporation this......day of...........
A. D., 19.....

.... Secretary.   .... President.

Shares $10 Each.

The following is an ordinary form of the stub bound in the stock certificate book against the certificate forms:

Certificate No.......... For..................Shares Issued for.................. Dated.................19.... Issued to.................... .... Address..................... Received the above Certificate ....19.... .... Certificate Canceled No........	(Form of Certificate)

The certificates may be sold and transferred, and for that purpose it is customary to print a blank power of attorney upon the back of the certificate. When this is properly signed by the stockholder in whose name the certificate is issued, the one to whom the stock is to be transferred may personally, or by his attorney, transfer the stock to his name upon the books of the corporation. That is, he may surrender the old certificate for cancelation and receive in lieu thereof a new certificate issued in his name, thereby becoming a **stockholder of record** in lieu of the former stockholder.

The following is an ordinary form of the assignment and power of attorney that appears on the back of a stock certificate:

FOR VALUE RECEIVED, ...hereby sell, assign, and transfer unto .... Shares of the Capital Stock represented by the within Certificate, and do hereby irrevocably constitute and appoint.. ....my true and lawful attorney to transfer the said Stock on the books of the within named Corporation, with full power of substitution in the premises.

Dated..............................19....

In presence of: ....

....

Notice. The signature of this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration or enlargement, or any change whatever.

Control.

The stockholders control the corporation through action taken at annual or special meetings. At such meetings a stockholder is ordinarily entitled to cast one vote for each share of stock standing in his name.

The immediate control is vested in the Board of Directors, the members of which are elected by the stockholders at the annual meeting of stockholders.

The stockholders, or the directors when authorized by the stockholders, adopt **by-laws,** which are rules providing for the calling of regular and special meetings of stockholders and directors, election of officers, duties of officers, and such other matters as may be desirable.

The Board of Directors elects officers to manage the affairs of the corporation when the Board is not in session. The officers are subject to the Board of Directors in all matters, and their duties are prescribed in the by-laws. The officers, as ordinarily provided for, and their duties, are:

President. The president is the chief executive officer of the corporation, presiding at the meetings of stockholders and directors, and having general supervision of all its affairs.

Vice-President. The vice-president performs the duties of the president in case of the latter's inability to act, and such other duties as may be provided for in the by-laws.

Secretary. The secretary records the proceedings of the stockholders and directors at their meetings, has the custody of the seal of the corporation, which he attests by his signature on certificates of stock, contracts, etc., and performs such other duties as may be required.

Treasurer. The treasurer has charge of the receipt and disbursement of moneys, and in many cases it is his duty to keep the accounting records.

There may be other officers, but in any event they will be elected and their compensation fixed by the Board of Directors, to which they are accountable.

Books and Records.

The books and records that are essential in the conduct of a corporation, may be divided for convenience, into two general classes, viz.:

1. **Corporate Records.** Under this will be grouped all books and records that are peculiar to the corporate form of organization, such as the **Minute Book** or **Record Book, Stock Book** or **Stock Ledger, Stock Certificate Book,** and the **Transfer Book.**

2. **Financial Records.** These records are intended to embrace the bookkeeping record of the financial transactions of the corporation, preferably kept on the double-entry basis, which records do not necessarily differ from the accounting records kept in the other forms of proprietorship. They would consist of the Journal, Cash Book, Ledger, and similar books, and the books and records supplementary thereto.

The first division is to receive particular attention in this Lecture, the detailed consideration of the second class being left for attention later.

Issues and Transfers of Stock.

In **close corporations,** that is, ones in which the stock is held by a few persons, where the transfers of stock are apt to be rare, the original entry of the issue of a stock certificate usually consists of the entry on the stub, or counterfoil as it is sometimes called, of the stock certificate, the stubs and certificates ordinarily being bound in a book.

The stub is filled in with the number of the certificate, the date of issue, name of stockholder and number of shares, and the stockholder, upon receiving his certificate, receipts for it at the bottom of the stub.

If the certificate is returned to the corporation for transfer to another, the assignment on the back is filled out with the name and address of the one to whom it is to be transferred and with the name of the attorney who will make the transfer on the books, and duly signed, the certificate is canceled, generally by punching the signatures of the officers who signed it, and pasted back against the stub from which it was issued, and a new certificate is issued in lieu thereof, in accordance with the assignment, the new stockholder receipting for the new certificate on its stub.

Thus, the stub and canceled certificate supply every detail essential to the record and for the posting to the Stock Book.

Stock Book.

In a stock corporation, the par value of the stock that has been issued is shown in the financial records in a single Ledger account known as a **Capital Stock Account,** no attempt being made to show the ownership of shares, this being done in a book or ledger known as a **Stock Book** or **Stock Ledger.**

The New York law requires that a Stock Book shall be kept, setting forth in alphabetical order the names of the various stockholders, with their respective addresses, number of shares standing in the name of each, when they respectively became the owners thereof, and the amount paid thereon. The law requires that this book shall be open to the stockholders and judgment creditors of the corporation at least three hours of each business day.

The Stock Book will, therefore, contain accounts in which are recorded the details of ownership of shares, equalling in the aggregate of par value the amount of the capital stock issued, as it is carried in a total sum in the Ledger belonging to the Financial Records.

It is usual to keep the Stock Book as a double entry ledger, showing the total amount of shares of stock issued and outstanding in a single account, which may be called Capital Stock Account, either as a debit or credit, it matters not which. This will show a balance of shares that

will equal, in par value, the balance of the Capital Stock Account in the Financial Ledger. On the contra side of the Stock Ledger, in proper accounts, appear the stock-holdings of the various stockholders, in shares, a separate account being given to each stockholder, the sum of the accounts equalling the total of the Capital Stock Account, thus establishing the valuable double entry check upon the accuracy of the book.

It is more usual in the Stock Book to debit the various stockholders and run the Capital Stock Account with a credit balance. Although less usual, it seems more natural to credit each stockholder with his shares, keeping the Capital Stock Account with a debit balance, merely as a balancing account, as it is more usual to think of a capital account, whether of shares or of an interest in a partnership, as a credit amount. It is quite immaterial, however, which form is adopted.

The law requires that the number of shares, not dollars, shall be shown. This is better, regardless of the law, for the amounts are round, and keeping the record in shares saves many useless figures.

The ruling of a Stock Ledger differs from that of the ordinary ledger. On the extreme left of the page are columns for the month and day of the month, then a column for numbers of certificates issued, followed by a column for numbers of certificates canceled, although these two columns are sometimes combined and only one used. To the extreme right are three columns, one for debits, one for credits, and the third for carrying out the balance of the account, so that the requirement of the law that the number of shares outstanding in the name of each shall be shown, may be met.

To illustrate the use of the ruling, it will be assumed that J. W. Jones, of Tuxedo, N. Y., acquired 100 shares of stock of a corporation, and on January 2, 1902, certificate No. 115 was issued to him therefor. Later on February 8, 1902, he sold 50 shares of his stock to W. H. Lane, of White Plains, N. Y., and presented certificate No. 115 with the power of attorney on the back thereof duly made out, transferring 50 shares to W. H. Lane and the other 50 shares to be reissued to himself.

In the first place, to record the acquisition of J. W. Jones of the 100 shares of stock, an account would be opened in his name, and credited with the number of shares. If it were an original issue of stock, the balancing Capital Stock Account would be debited; if it were a transfer, the account of the transfer would be debited. Upon surrender of certificate No. 115, it would be canceled by destroying the signatures by punching or otherwise, and would be pasted back against its stub in the stock certificate book, and new certificates for 50 shares each would be issued in the names of J. W. Jones and W. H. Lane. In the account of J. W. Jones,

the cancelation of the entire certificate No. 115 must be shown, balancing the account, and the new certificate, No. 125 for 50 shares, would be credited. An account is opened for W. H. Lane, as was done in the first instance for J. W. Jones. It is apparent that transfers do not affect the Capital Stock Account, which will be undisturbed, except in case of original issues of stock or reduction of outstanding stock, the latter being of rare occurrence.

The procedure will be seen from the following illustration:

J. W. JONES, Tuxedo, N. Y.

Date		Ctf. Issued	Ctf. Canceled	Dr.	Cr.	Balance (shares)	Amount Paid (dollars)
1902 Jan.	2	115			100	100	Full Paid.
Feb.	8		115	100		0	
"	8	125			50	50	

W. H. LANE, White Plains, N. Y.

Date		Ctf. Issued	Ctf. Canceled	Dr.	Cr.	Balance (shares)	Amount Paid (dollars)
1902 Feb.	8	126			50	50	Full Paid.

In addition to the columns shown in the foregoing rulings, columns are sometimes provided in which to enter the name of the transferee or

transferor, as the case may be. Thus, a column "from whom transferred" in the account of W. H. Lane would show from whom his stock was transferred. This information however could be obtained from the stock certificate stub with small labor, were it required.

In case of stock being only partly paid, it is necessary to provide a column to show the amounts actually paid in thereon from time to time. It may be placed to the extreme left of the page, or as shown in the foregoing. In case of fully paid stock it is not usual to enter the dollars in each case, a notation that it is fully paid being sufficient.

It will be seen that the Stock Book ruling is not unlike the Journal ruling, except that an additional column is provided to show the balance of the account. This is not an unusual ruling in financial books, and is used by savings banks to show the balance of the customer's account from day to day, or as often as there may be changes, and it is sometimes used as a ruling for the Customers' Ledger in a mercantile business.

Minute Book.

It is necessary to keep a **Minute Book,** or **Record Book,** in which the proceedings of the meetings of the stockholders and directors are recorded. This record, in common with all other purely corporate records, is kept by the Secretary.

If properly kept, the Minute Book furnishes a complete chronological record of the more important affairs of the corporation, including the election of directors, with their terms of office and compensation, if any, the by-laws as they are adopted and amended, the amount of capital stock authorized and issued, and the purposes to which its proceeds are devoted, the issuance of other securities, the adoption of contracts, election of officers and their terms and salaries, and the innumerable matters that are necessarily brought before the stockholders and directors for their formal approval.

In recording the minutes of a meeting of the Board of Directors, the place and date of the meeting should be first stated, that the meeting was duly called in accordance with the by-laws, who presided at the meeting, and the names of the directors present, in order to show that a quorum, that is, the number necessary to transact business, was present.

The by-laws usually specify how notice of meetings shall be given, but, as a general rule, it is better to state that the meeting was "duly called," than to attempt to specify the steps by which it was called If the latter is attempted, it must be done with great exactitude, or the record will itself show a defect. In the former case, in absence of proof to the contrary, it will be assumed that the meeting was properly called.

Following the statement that the meeting was duly called is, ordinarily, a statement that the minutes of the preceding meeting were read and approved.

The business is generally transacted in the form of resolutions. A resolution covering a particular matter is presented by a director with a motion that it be adopted. The motion is supported by another director, and then presented by the presiding officer for discussion and vote. It is customary in the minutes to state the name of the director who presents, and the one who seconds, the motion, the resolution in full, and the fact of its adoption or rejection. In this way, the business transacted by the Board of Directors is recorded in the Minute Book. The record is ordinarily signed by the Secretary and approved and countersigned by the President after its approval by the Board of Directors at a subsequent meeting, although in many corporations the Secretary alone signs the minutes.

The same order of record is used for meetings of stockholders, which are ordinarily recorded in the same Minute Book, the records of the stockholders' and directors' meetings appearing in the order in which they are held. The name of each stockholder in attendance at a stockholders meeting is recorded, with the number of shares of stock standing in each name, as well as a statement of the shares represented and voted by **proxies,** that is, persons authorized by power of attorney to vote stock standing in the names of others.

The Minute Book furnishes the best, and practically the only, record of the regularity of stock and bond issues, approval of contracts, and other important matters, and it is therefore highly important that it be properly kept. To the accountant, the Minute Book furnishes evidence of the correctness of many items of the Balance Sheet, and of salary and other expense items. An index of the Minute Book should be kept, in order that ready reference may be had to the resolutions.

Whatever may be the merits of loose-leaf devices for certain lines of work, they should never be employed in any form for a Minute Book. The book should be substantially bound, preferably in full leather, and the minutes should be written in with a pen or with a book typewriter. Reliance in many cases must be placed on the record, and its form should be one that will, as nearly as possible, prove its authenticity on its face. Many cases are known, where the practice of writing minutes on a typewriter and binding them into a loose-leaf binder has been in vogue, in which the minutes of a meeting were taken out and destroyed in lieu of holding a meeting to rescind resolutions. This undesirable action would not occur were a proper form of Minute Book used.

Transfer Records in Large Corporations.

In large corporations, where the stock is widely held and dealt in on the stock exchanges, a more elaborate system than heretofore described is necessary in order in insure accuracy in transferring stock and to facilitate the tracing of particular transfers.

In addition to the Stock Ledger and Stock Certificate Book, a Transfer Journal is maintained. The book is opened flat and both pages are used for a transfer. On the left hand page are recorded the date, number of the transfer, name of the person from whom stock is received, number of certificate and number of shares, the latter appearing in a column to the extreme right of the left hand page.

On the opposite, or right hand page, against the entry already outlined, is recorded the name of the new stockholder, together with his address, the number of the new certificate and number of shares, the latter equalling the number received as per the entry opposite.

If the stock is received from a number of holders to be transferred to one name, it is run under one transfer number; if, on the other hand, it is the stock of one person to be transferred into the names of several new holders, it is likewise covered by one entry. It will be noted that such a Transfer Journal merely arranges, in chronological order, the facts contained in the stubs and canceled certificates, and, in addition, gives to each transfer a distinctive number by which it may be traced. The number of the transfer, date, numbers of old and new certificates, number of shares, etc., are posted to the Stock Book or Ledger.

In the case of an additional issue of stock by the corporation, it is entered on the left hand page as an original issue, to be posted to the balancing Capital Stock Account in the Stock Book, and on the right hand page the names of the new holders, numbers of certificates, etc., will be entered. In the case of different classes of stock, a separate ledger and transfer journal are usually kept for each class.

Listing Stock upon Stock Exchange.

Only such stocks and bonds as have been added to an official list kept by the Committee on Stock List are dealt in on the New York Stock Exchange. The Committee on Stock List requires that, before the securities of a corporation are listed, it shall make a formal application, containing a statement of the organization and purpose of the corporation, its capitalization, the object of the new issue, and a balance sheet and statement of earnings, to be accompanied with copies of the charter or articles of incorporation, by-laws, stockholders' and directors' resolutions covering the issue, with any contracts or leases affecting the issue, all

to be certified by an officer of the corporation. In this way an attempt is made to bar from the list questionable issues of securities.

Certain rules have been adopted by the Stock Exchange as to what constitutes a "good delivery" of stock, that is, as to when the formalities of assignment, etc., have been met so that the purchaser must accept the certificate. These rules largely govern the action of the transfer offices of the large corporations in accepting stock for transfer.

The Stock Exchange requires that bonds and certificates of stock must be printed from steel plates made by an engraving firm which they approve, so that no printed or lithographed certificates or bonds can be dealt in on the Exchange.

Lists of Stockholders.

It is necessary to make lists of stockholders from the Stock Ledger for use at stockholders' meetings and for dividend paying-purposes. In a small and closely held corporation this is a simple matter, but in the larger corporations, where the number of stockholders runs into the thousands, it is more difficult to prepare such lists at frequent intervals from large and clumsy ledgers.

It is not unusual for a corporation to have two or more classes of stock, and in making up a list it is difficult to sort out duplicates caused by the holding by the same person of more than one class of stock. It is, of course, desirable, in case of mailing notices of meeting, sending out annual reports, etc., to have a list of the actual holders of stock, without such duplication of names.

The difficulty is obviated, and the labor involved in making a list for any purpose is reduced, by keeping a supplemental list of the stockholders on cards, each card giving the name of a shareholder, his address and the total number of shares, in lead pencil, of each class of stock standing in his name. These lead pencil totals are corrected from time to time as transfers are made, so that a list may be made at any time with the names of the stockholders in alphabetical order, with their respective addresses and holdings of stock, or envelopes may be addressed by running through the cards. The list, when completed, may then be checked against the Stock Ledgers.

In fact, the entire record is sometimes kept in a card ledger without the use of the ordinary bound Stock Ledger, but this practice is the exception rather than the rule. The use of loose-leaf ledgers has been found advantageous in the case of some of the largest corporations, the heavy labor incident to opening new ledgers thereby being avoided.

ADVANCED THEORY AND PRACTICE OF ACCOUNTS.

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CORPORATIONS—LECTURE II.

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OPENING OF FINANCIAL RECORDS.

In General.

The principles of Double Entry bookkeeping are applicable to the accounting of any undertaking, irrespective of its form of organization. Double Entry has, in the past, found its most usual expression in single proprietorship and partnership accounting, and from this, perhaps, has arisen the erroneous idea that corporation accounting, as it is called, is a thing apart from bookkeeping and accounting in general, capable of being taught and practiced independently.

It is a fact, however, that the accounting which has grown up with the general incorporation of business undertakings is but the development and adaptation of the double entry bookkeeping that answers so well the requirements of the other forms of business organization.

It is, therefore, the study of the development and adaptation of Double Entry to the corporate form of organization that confronts the student, rather than the study of a subject involving new principles.

The financial books themselves, so far as their names and general purposes are concerned, do not differ from those of a single proprietorship or a partnership. The Journal, Cash Book and Ledger are the three principal books. If a trading business is transacted, and the volume of transactions justifies, a Sales Book and Purchases Book, and, perhaps, a Returned Sales Book and a Returned Purchases Book are provided; the Cash Book will be amplified by additional columns, and the Ledger will be divided into a Customers' Ledger, Creditors' Ledger and General Ledger, and the first two ledgers will, perhaps, be further sub-divided. Bills Receivable and Bills Payable books may be used, and controlling accounts may be instituted to facilitate the taking of trial balances and to obtain the other benefits that come from their use. In other lines of enterprise, the books will present no unusual features on account of the corporate form of organization.

It will thus be seen that the financial books themselves present no unusual features, and the peculiarities of corporation accounting must be looked for in the method of recording certain transactions, particularly those relating to the contribution of capital and the payment of profits to stockholders, known as **dividends.**

Consideration for Issue of Stock.

The opening of corporation books is dependent to such an extent upon rules of law, that, although this is a Lecture upon Theory of Accounts rather than upon Law, it is necessary to quote, in full, Section 42 of the Stock Corporation Law of New York, which is a counterpart of the New Jersey law, and which states substantially the provisions of the law in many other states. It is as follows:

> "**Consideration for issue of stocks and bond.**—No corporation shall issue either stock or bonds except for money, labor done or property actually received for the use and lawful purposes of such corporation. Any corporation may purchase any property authorized by its certificate of incorporation, or necessary for the use and lawful purposes of such corporation, and may issue stock to the amount of the value thereof in payment therefor, and the stock so issued shall be full paid stock and not liable to any further call, neither shall the holder thereof be liable for any further payment under any of the provisions of this act; and in the absence of fraud in the transaction the judgment of the directors as to the value of the property purchased shall be conclusive; and in all statements and reports of the corporation, by law required to be published or filed, this stock shall not be stated or reported as being issued for cash paid to the corporation, but shall be reported as issued for property purchased."

It will be noted that the foregoing amounts, in effect, to a rule that the stock of a corporation cannot be sold at a discount, but must be exchanged for cash at par, or for property or services that shall be worth, in the judgment of the directors, the par value of the stock issued therefor.

The stock of a corporation may, therefore, be issued for one, or more, of the following items:

1. Money;
2. Labor done;
3. Property.

Issue of Stock for Money Only.

The most simple state of affairs that could exist in the opening of corporation books of account would be the issuance of the total authorized capital stock for an amount of cash equal to its par value.

The first actual bookkeeping record in such a case is made in the Corporate Records, heretofore described. Stock certificates are issued in the names of the incorporators for the shares for which they have respectively subscribed, upon payment to the corporation of their par value in cash.

A Stock Ledger, or Stock Book, as the law terms it, is then opened, and from the detail contained in the stubs of the stock certificates, an account is opened with each stockholder, showing the number of shares issued in his name. A Capital Stock Account is opened to balance the individual accounts, which serves the double purpose of showing at any time the total amount of stock issued, and of providing the double entry check upon the accuracy of the Stock Ledger.

The financial books proper are opened by a Journal entry, that should set forth, as a preliminary to the actual financial record, the name of the corporation, its object, capitalization, shares, with any other desired general information, and with the names of the incorporators and their respective subscriptions for capital stock. A *pro forma* explanatory opening, with financial entry, to open the books of a corporation with an authorized capital stock of $100,000, all subscribed and paid for in cash, is as follows:

THE JOHN F. HOWARD COMPANY

A corporation organized under the laws of the State of New York, with an authorized Capital Stock of One Hundred Thousand Dollars

—$100,000.00—

divided into One Thousand (1,000) shares of the par value of One Hundred Dollars ($100) each, with express and implied powers necessary to carry on the business of manufacturing a commercial substitute for ivory, said stock being subscribed as follows:

John F. Howard	500	shares
John F. Howard, Jr.	200	"
W. B. Kinney	100	"
A. B. Souders	100	"
W. J. Ryan	100	"
Total	1000	shares

New York, January, 1902.

— 2 —

CASH	$100,000	
To CAPITAL STOCK		$100,000

For cash received in payment of stock subscribed as above, certificates being issued, as under:

Ctf. No. 1	John F. Howard	500	shares
Ctf. No. 2	John F. Howard, Jr.	200	"
Ctf. No. 3	W. B. Kinney	100	"
Ctf. No. 4	A. B. Souders	100	"
Ctf. No. 5	W. J. Ryan	100	"
	Total	1000	shares

If a Cash Book is to be maintained, the amount of cash is carried to the debit of the Cash Book; or, as is sometimes the case, the original entry for shares issued for cash may be passed through the Cash Book exclusively, although it is at all times satisfactory to have a complete record of the opening entries in the Journal.

If there is no Cash Book, an unusual case, a Cash account is opened in the Ledger, to which the amount is posted from the Journal. Even though a Cash Book is maintained, a Ledger Cash account may be opened, and cash receipts and payments posted in summary form monthly.

For the balancing posting, an account, under the caption of Capital Stock, is opened, to which is posted, in dollars, the amount of stock issued, thus completing the posting of the opening entry.

No attempt is made, in the General Ledger, to show the distribution of the stock among stockholders as this is accomplished in the Stock Ledger.

The conversion of the cash, thus brought into the corporation, into the various assets necessary for the conduct of the business, is recorded along the usual lines of double entry bookkeeping.

The Capital Stock, in some cases, is divided into classes. For example, there may be **Preferred Stock,** that, through a provision in the certificate of incorporation, may have a preference in dividends, that is, in the distribution of profits, or a preference in the return of capital, upon dissolution, or both, as well as **Common Stock.** Without an express provision, Preferred Stock will not have a preference in the return of capital in case of the liquidation, or winding up, of the corporation.

In the case of there being more than one class of stock, an account will be opened in the General Ledger for each class, for example, Preferred Stock Account, to which the par value of all Preferred Stock issued is credited, and a Common Stock Account, to which the par value of all Common Stock issued is credited.

In the event of there being only one class of stock, the term Capital Stock, and not Common Stock, is ordinarily used. It is Common Stock, of course, but the particular designation is not essential.

Issue of Part of Authorized Stock for Money.

There are two complicating contingencies that may occur in the opening of corporation books, even in a corporation in which it is not intended to issue stock except for cash, viz.:

1. Issue of only a part of the authorized capital;
2. Issue of partly paid stock.

The first contingency is contemplated in Section 5 of the Business Corporations Law of New York, which is typical of the provision of many other states on this subject. It is as follows:

> "**Payment of Capital Stock.**—One-half of the capital stock of every such corporation shall be paid in within one year from its incorporation, or the corporation shall be dissolved, and the directors, within thirty days after such payment shall make a certificate of the fact of such payment, which shall be signed and acknowledged by a majority of the directors, and verified by the president or vice-president and secretary or treasurer, and filed in the offices where the certificates of incorporation are filed. The dissolution of any such corporation for any cause shall not take away or impair any remedy against it, its stockholders or officers, for any liabilities incurred previous to its dissolution."

It will be seen from the statute quoted that a corporation may have an amount of authorized, but unissued, capital stock. It is not considered the best practice, text-book theories to the contrary notwithstanding, to carry into the financial books the amount of such authorized, but unissued, stock.

To illustrate, a corporation is organized with a total authorized capital stock of $100,000, of which only $75,000 is issued, and for which the corporation receives $75,000 in cash. The remaining $25,000 is, therefore; authorized, but unissued, capital stock.

To record properly the foregoing transactions an entry should be made, omitting the explanatory opening and entry explanation for brevity, as follows:

CASH	$75,000	
To CAPITAL STOCK		$75,000

So far as the record of the $25,000 of authorized, but unissued, stock is concerned, this may be ascertained at any time from the Minute Book, as it will show the original capitalization and the issues of stock from time to time.

In addition, the preliminary to the opening entry in the financial books, as already explained, will state the amount of authorized capital stock, and subsequent issues will appear in the financial books.

The erroneous text-book method, to which reference has been made, is to debit Cash with $75,000, debit an account called Treasury Stock with $25,000, and credit Capital Stock with $100,000. This brings the unissued stock into the financial books, and encumbers the books with a useless $25,000 on each side of the accounts. If the additional $25,000 of stock is ever issued, it will then be quite time enough to carry it into the financial books.

In England, it may be said, there is a provision of law that requires a corporation to show, in its published Balance Sheet, its total authorized capital. There is no such requirement in New York, and probably not in this country.

Treasury Stock, properly so called, can only be created by the return to the corporation, through purchase or donation, of Capital Stock of the corporation that has theretofore been issued. In such cases a Treasury Stock Account may be raised and charged with its value, actual or par, as the particular instance may require. It is apparent, therefore, that authorized, but unissued, capital stock, can not be treated as Treasury Stock.

Issue of Partly Paid Stock for Money.

The second complicating contingency arises from the practice of issuing partly paid stock. In New York, which will again furnish a typical example of the ordinary statute upon this subject. this is made possible by Section 62 of the Stock Corporation Law, as follows:

> " **Partly paid Stock.**—The original or the amended certificate of incorporation of any stock corporation may contain a provision expressly authorizing the issue of the whole or any part of the capital stock as partly paid stock, subject to calls thereon until the whole thereof shall have been paid in. In such case, if in or upon the certificate issued to represent such stock, the amount paid thereon shall be specified, the holder thereof shall not be subject to any liability except for the payment to the corporation of the amount remaining unpaid upon such stock, and for the payment of indebtedness to employes pursuant to sections fifty-four and fifty-five of this chapter; and in any such case, the corporation may declare and may pay dividends upon the basis of the amount actually paid upon the respective shares of stock instead of upon the par value thereof."

This enables a corporation, by express provision in its certificate of incorporation, to issue partly paid stock. This privilege is subject to the provision of Section 5, of the Business Corporations Law, which has been quoted, that one-half of the capital stock shall be paid into the corporation within one year. In case of the issuance of such partly paid stock, the certificates are issued as usual, except that they should indicate upon their face that the stock is not fully paid.

The vital point in accounting is that the corporation receives a certain percentage of the capital, and the right to call for enough additional capital to equal, with the original amount paid in, the par value of the stock. When the difference is paid in, the corporation is bound to issue its fully paid certificates of stock.

Upon the basis of receiving cash and promises to pay in exchange for stock **issued,** the initial entry, whether carried out in the Journal, or partly in the Journal and partly in the Cash Book, in the case of a capitalization of $100,000, payable 50 per cent. upon subscribing and the balance in monthly instalments of 10 per cent., would cover the following principles of debit and credit, viz.:

CASH..	$50,000	
STOCKHOLDERS' SUBSCRIPTION ACCOUNT	50,000	
To CAPITAL STOCK....................		$100,000

To this entry should be added a suitable explanation, setting forth the names of the stockholders liable for further payments, with the respective amounts.

It more frequently happens, however, that the stock is not issued until it is fully paid, and in such cases the entry would be as follows:

CASH..	$50,000	
STOCKHOLDERS' SUBSCRIPTION ACCOUNT	50,000	
To SUBSCRIPTIONS TO CAPITAL STOCK		$100,000

As the payments are made, Cash would be debited and Stockholders' Subscription Account credited. As the subscriptions are paid in full, stock would be issued, Subscriptions to Capital Stock being debited and Capital Stock credited. When all instalments are received and the stock issued, the Stockholders' Subscription Account and Subscriptions to Capital Stock Account are closed out and Capital Stock Account stands credited with the entire issue of $100,000. The following entries illustrate the principles:

CASH..

To STOCKHOLDERS' SUBSCRIPTION ACCOUNT.........

SUBSCRIPTIONS TO CAPITAL STOCK.......................

To CAPITAL STOCK...

The only practical difficulty is that it is undesirable to maintain an account in the General Ledger with each stockholder, if such accounts are very numerous. They are of a temporary nature, and are no part of the trading operations of the undertaking, and yet it may become necessary at any time to know the exact amount due from an individual. Further, despite the fact that it may become necessary at any time to determine the status of an individual's account, it is perhaps desirable to know the aggregate amount due more frequently than the status of particular accounts.

In small corporations, individual ledger accounts are sometimes opened in the General Ledger, in lieu of a summary account, or perhaps more often, as outlined in the form of entry above, a summary account is opened under the caption of Stockholders' Subscription Account, or other suitable name. Where the individual accounts are thus dispensed with, the amount due from any particular individual is arrived at from the explanations contained in the entries, or from the ledger account, if this information is carried, as it may be, to the detail columns of the ledger account.

Where it is the intention to call in the balance due in instalments, the total amount may be divided into Instalment No. 1, Instalment No. 2, etc., and a ledger account opened for each instalment. The names of the subscribers may be entered in the explanation column on the debit side, filling in on the credit side opposite the names of the particular subscribers the payments as made. The names of those in default will thus not be credited and are easily ascertainable.

The most satisfactory plan, especially where the stockholders are numerous, is to maintain the Stockholders' Subscription Account in the General Ledger as a summary account, to which the total to be called is posted as a debit, and to which credits are made in periodical totals as amounts are paid in.

A subsidiary ledger is opened, somewhat on the lines of a stock ledger, in which accounts are opened for the various stockholders, as per the explanation in the Journal entry, and a balancing account opened which corresponds to the summary account in the General Ledger. As payments are made, they are entered in the Cash Book in a special column. The individual subscribers' accounts are credited from day to day from the Cash Book, and at intervals, the Stockholders' Subscription Account in the General Ledger is credited with total cash received, and the balancing account in the subsidiary ledger debited with the same total. Thus, from the subsidiary ledger, the state of any individual's account may be determined, and from the General Ledger, the total amount due may be ascertained when it is posted up to date.

This subsidiary account is sometimes maintained in the Stock Ledger, by providing in each stockholder's account debit and credit money columns, charging the total amount, and crediting all payments made. The Stock Book must, in any event, show the amount paid by each stockholder upon his subscription for stock, and combining the two economizes in effort.

A still further amplification of the procedure in large corporations is to maintain a special cash register for recording receipts on account

of stock subscriptions, carrying the receipts to the Cash Book in totals only, and posting directly to the individual accounts affected from the Cash Register.

"Dummy" Incorporators.

It is sometimes desirable to have the incorporation effected by persons who are not the real parties in interest, known as "dummy" incorporators. It is usual in such cases to have the certificate of incorporation signed by the men selected, not less than three, usually for shares of the par value of $500, and it is customary for such incorporators to be named in the certificate as directors.

The payments for the stock subscribed should actually be made, some corporation lawyers insisting that the payments be made by checks deposited in the bank by the corporation. The certificates are then issued to the incorporators, who assign them in blank and turn them over to the real parties in interest, who reimburse them for the cash paid in, if it was not, in fact, advanced in the first instance.

If the incorporators are not to serve as directors, they will present their resignations and directors will be elected to fill the vacancies, and the stock assigned by them will be transferred to the real owners. If they are to act as directors, and the holding of stock is a necessary qualification, the assigned certificates will be held assigned in blank, so that the directors will be **stockholders of record,** although they will not, as a matter of fact, own any stock.

So far as the accounting is concerned, it must be ascertained that the corporation received value equal, in the judgment of the Board of Directors, to the par of the stock subscribed, and that the certificates were actually issued. Cases are frequently found in which the stock is subscribed by "dummies" but issued in the first instance to the parties in interest, with no assignment. This is a serious defect that must be remedied by counsel, and is a condition that the accountant should not display in the books.

Issue of Stock for Property, Labor Done and Money.

In the organization of a corporation, even where the bulk of the stock is to be issued in exchange for property, it is quite usual for a few shares to be subscribed and paid in cash, say five shares of $100 each, although it is not an essential that any part of the capital be paid in cash. The organization may be thus effected so long as the capital with which the corporation begins business is not less than $500, and so long as one-half of the authorized capital is paid in within one year.

Stock is also sometimes issued to pay for legal and other expenses incurred in promoting and organizing the corporation.

It will, therefore, happen that, except in the case where the shares are paid in cash only, the corporation will receive two, and sometimes three, of the items that may be received in exchange for stock.

To illustrate, a corporation may be organized with an authorized capital of $10,000, of which ten shares of $100 each, $1,000 par value, are to be issued for cash, and 70 shares, $7,000 par value, are to be issued for the property of a partnership which is fairly worth, at market prices, the $7,000 thus to be paid for it.

The opening entry, if passed entirely through the Journal, and the issue of stock for Cash and for Plant and Sundry Assets is simultaneous, might properly be as follows:

CASH....................................	$1,000	
PLANT & SUNDRY ASSETS..................	7,000	
To CAPITAL STOCK....................		$8,000

The item of Plant & Sundry Assets might be divided into the different asset accounts, such as Plant, Merchandise, and Accounts Receivable, in the initial entry, as is the custom with English accountants. In American practice, however, it is usually entered in the first instance by a charge to Plant & Sundry Assets, to be distributed later to appropriate property accounts under captions and values authorized by the Board of Directors of the corporation. In this way the responsibility for fixing the values is placed where it belongs, and the opening may be carried out without delay.

No account is taken in the financial books of the amount of authorized, but unissued, stock, being 20 shares, $2,000 par value, for the reasons given in considering a similar case in the disposition of stock for cash only.

It need hardly be stated that the above entry should be preceded by a resumé of the principal facts of capitalization, business, etc., embodied in the certificate of incorporation, as was suggested in the first example of opening corporation books. It will hereafter be taken for granted that the student understands that the entry should be preceded by such an explanation; that the authorized, but unissued, stock is not to be carried into the financial books; and that the cash part of the entry may be made in the Journal, to be posted to the Cash Book, or passed through the Cash Book exclusively.

Continuing the illustration just given, it will be assumed that the same state of facts exists with the exception that the vendors require that $8,500, in stock, shall be paid for the property that is to be turned

over, instead of the amount $7,000, which would equal the market value of the tangible assets.

The vendors may base their claim for this larger amount on the ground that there is good-will to be taken into consideration, or that the stock which they are to receive is not readily marketable, and would have to be sold, if at all, under a discount. At any rate, vendors usually require, in exchange for the property and good-will of a going concern, an amount of stock the par value of which considerably exceeds the market value of the net assets.

It will be further assumed that $500 of stock is issued on account of labor and services in organizing the corporation.

These various items will necessitate the issue of the entire authorized capital stock, as appears from the following entry:

CASH	$1,000	
PLANT & SUNDRY ASSETS	8,500	
ORGANIZATION EXPENSES	500	
To CAPITAL STOCK		$10,000

In practice, the acquisition of Cash and of Plant & Sundry Assets, and the incurrence of Organization Expenses, might not be simultaneous; in which case a single entry would not include the entire transactions; each transaction being recorded as it occurred. In the illustrations, for the sake of brevity in setting forth principles, they are treated as one transaction.

Later, when values have been placed upon the different assets by the board of directors, the necessary asset accounts are raised and charged, including, if necessary, a Good-Will account, and the Plant & Sundry Assets account is closed.

Assuming that the Plant was valued at $5,000, Stock on hand $1,000, Accounts Receivable $1,000 and Good-Will $1,500, such an entry would be as follows:

PLANT	$5,000	
STOCK ON HAND	1,000	
ACCOUNTS RECEIVABLE	1,000	
GOOD-WILL	1,500	
To PLANT & SUNDRY ASSETS		$8,500

Organization Expenses Account is frequently allowed to stand, to be written off out of profits during the first few years, say three, of the undertaking, instead of charging the entire amount against the profits of the

first year. A less conservative practice is to charge the amount to the cost of property.

The above problem may be solved in a slightly different way, by charging Plant & Sundry Assets in a separate entry with the \$8,500 and crediting the Vendor. Later, when stock is issued to the Vendor in settlement, his account is closed by a charge, and Capital Stock Account is credited for the amount issued.

This method is especially advantageous when the taking over of the assets and issuing stock therefor are not simultaneous, and in cases where liabilities are assumed as well as assets taken over.

Thus, in a case where the assets are carried on the books of the vendor at \$9,000, and the liabilities assumed amount to \$2,000, and the agreement is that the vendor shall receive \$8,500 in stock for this net equity of \$7,000, the entry would be as follows:

PLANT & SUNDRY ASSETS................	\$10,500	
To SUNDRY LIABILITIES.............		\$2,000
To BLANK, Vendor....................		8,500

The Plant & Sundry Assets Account, and Sundry Liabilities Account, would later be distributed into specific accounts in pursuance of the action and direction of the Board of Directors.

A slightly different way to record this transaction would be as follows:

PLANT & SUNDRY ASSETS................	\$10,500	
To BLANK, Vendor....................		\$10,500
BLANK, Vendor............................	2,000	
To SUNDRY LIABILITIES.............		2,000

It will be seen that this is practically the same as the preceding method, although it may be contended that there was never a moment of time at which the real liability to the vendor was \$10,500, as shown momentarily by the first entry. The distribution into the particular asset and liability accounts would be made later.

Acquisition of Properties.

In the case of the purchase of a going concern, the contract of purchase will specify a date at which the transfer is deemed to have taken place, or a date at which it is to take place. This date becomes the accounting dividing line between profits, those accruing before that date belonging to the vendor, and those accruing subsequently belonging to the vendee.

The line of demarcation must be sharply drawn and care exercised to make the apportionment in accordance with the principle stated.

If the vendor continues to hold and operate the property, he does so for the account of the vendee, and must turn over to the vendee the profits earned, although entitled to compensation, no doubt, for services rendered.

If a period of time elapses between the date agreed upon as the time at which an enterprise is to be turned over, and the actual organization of the buying corporation, any profits earned should be treated as a diminution of the purchase price. Likewise, expenses incurred may be capitalized and added to the cost of the property. Otherwise, the corporation would be in the untenable position of earning a revenue or incurring a loss before its existence and starting operation with a balance of profit or loss.

The corporation can not make a contract before it is organized, but the contract of purchase is often made by the promotors of the corporation, who assign the contract and all equities thereunder, in consideration of a certain amount of the stock or other securities of the new corporation. The net asset value acquired under the contract is the amount that must be set up in offset to the securities issued in payment, and technical profits, earned before actual possession is acquired, must be merged in such net asset value.

For example, the business of a partnership with a capital of $100,000 was to be taken over as at January 2, 1902, in consideration of an issue of $100,000 of the stock of a corporation, and the business was not actually taken over until January 23, 1902. During the three weeks the capital increased, after paying all expenses and charges, to the extent of $1,750, through profits secured. The $1,750 can not be carried into the accounts of the corporation as a profit, but must be merged in the cost of the properties acquired, the net asset value of which must be stated at $100,000 and not at $101,750. The amount would preferably first be applied to writing down such intangible assets as good-will or patents, and then to such assets as plant and machinery. If it were not advisable to write the assets down, a special reserve for depreciation or loss could be credited so long as it is clearly shown that it is not a profit. An asset should be taken into the accounts at its cost, and if a profit should be shown in such a case, it would be taken in at an amount in excess of its cost.

Inversely, if a mortgage were made and bonds issued thereunder during the process of acquiring the properties, any interest thereon before actual trading or operations began would be a charge against the cost of property, because it is a necessary incident to such acquisition. That

is, such interest charge is not incurred as a part of the cost of securing profits through operation, but as a part of the cost of securing the necessary equipment with which to operate. Were it otherwise, the corporation would begin to operate with a loss upon its books. If, as a matter of conservative business policy, it is decided not to capitalize, that is carry to the cost of the property, such interest, a charge therefor may be made against the first year's profits, when secured, in such a way that the results of operation or trading will not be obscured, and the property written down with the amount.

Corrective Opening Entries.

It is not unusual to find instances in which corporate accounts have been imperfectly opened, or not opened at all. The corrective work necessary will depend upon the circumstances of the specific case.

In the case of a corporation organized to originate a business, it is not infrequent to find that the amount of cash actually received is charged to a Cash account and the amount credited to an account called Stock Receipts account, or some similar name. In other cases, it may happen that no method of accounting is attempted further than the keeping of a Minute Book, a Check Book, and an account with the bank. In still other cases, especially where the corporation is organized to take over the business of a partnership, the attempt may be made to maintain an account with each stockholder, showing the amount of stock in his name, somewhat after the manner of keeping capital accounts in a partnership. The most chaotic condition that is likely to be found is an absence of a knowledge of the assets owned and liabilities incurred, and the absence of an adequate record from which such facts may be ascertained.

No matter in how imperfect a condition the accounts may be found, there are certain points that must be established in order to bring the books to a condition where they will disclose the facts as to financial position. The process, in case no accounts have been kept, is to prepare a financial statement, along the lines of a balance sheet, carrying the assets to the left, and the liabilities and capital stock to the right, in opposition thereto.

To begin with, the amount of the capital stock issued and outstanding, if regularly authorized, can be ascertained from an inspection of the Minute Book, care being taken that no greater amount of stock is issued than is authorized by the certificate of incorporation and the resolutions of the stockholders and directors. The authority for stock issues being established in the Minute Book, an inspection of the Stock Certificate Book, if it has been properly kept, will disclose the certificates that

have been issued, the names of the holders thereof, and the number of shares for which each is drawn. The par value of the stock that is found to be authorized, issued and outstanding, should be carried to the right side of the financial statement, and provides the starting point in the construction of a statement to display the financial position of the corporation. At this stage it should be determined that a Stock Book has been kept, containing, in alphabetical order, accounts showing the stock holdings, in accordance with the statutory provision that has been cited in a previous Lecture.

The liabilities, with the aid of the creditors, may often be determined without difficulty, and should be listed and displayed on the right side of the statement in conjunction with the capital stock. The amounts of capital stock and liabilities are determined first on account of the ease with which they may, in the majority of cases, be established.

The assets should be inventoried, and such items as Real Estate, Plant, Machinery, and other permanent assets, carried into the left side of the statement, in opposition to the capital stock and liabilities, at their cost, if such cost can be ascertained; if not, at an appraised value to be obtained from the best authority available. If any of the assets were acquired in exchange for issues of stock, the transaction will, in all probability, be disclosed by an inspection of the Minute Book, and the assets should be stated at their cost in par value of the stock issued therefor, irrespective of market, or other, values. Care should be taken that all assets are inventoried and brought into the statement.

After all of the issued and outstanding capital stock, and all of the liabilities, of the undertaking, have been displayed on the right side of the statement, and all of the asset values have been carried into the statement on the opposite, or left, side, the statement should be brought to a balance by a Profit and Loss Account. If the assets exceed the combined amount of capital stock and liabilities, a profit exists in the business, and should be displayed by a Profit and Loss Account credit balance. If, on the other hand, the combined capital and liabilities exceed the amount of the total assets displayed, a loss exists, that should be displayed by a Profit and Loss Account debit balance.

Provided that all of the assets, capital stock and liabilities have been taken into the statement, the Profit and Loss Account will invariably show the correct result as to profit or loss. This is true, because, in the first instance, the asset value received by the corporation will exactly equal the amount of capital stock issued. If, aside from the original contribution of capital, assets and liabilities were acquired and incurred that exactly equaled each other, there would be no profit or loss; but, if the

assets acquired exceeded the amount of the liabilities incurred, a profit would exist. Inversely, if the liabilities incurred exceeded the amount of assets acquired, a loss would exist, and in either case the balance would be effected, and the true condition shown, by bringing the Profit and Loss Account into the Statement.

With the statement prepared, as a basis, a Journal entry is passed debiting the assets and crediting the liabilities and Capital Stock, accounts in the Ledger are opened to conform, and the postings are made. The books being thus opened, the succeeding transactions are recorded in due course.

In case the record has been kept as in a partnership, or some other systematic attempt at a complete record, the books of the corporation may be opened by a Journal entry stating the original position as to assets acquired, liabilities incurred, if any, and stock issued. The subsequent transactions may be brought into the accounts by a summary entry, carrying in the balances of the nominal accounts, as well as amounts sufficient to adjust the other accounts to their proper amounts as shown by the trial balance of the books kept on the partnership or other basis.

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CLASSIFICATION OF ASSETS AND LIABILITIES.

Capital Assets and Current Assets.

A part of the capital of an organization, corporate or otherwise, in the ordinary course, will be required for investment in assets that will be held for the permanent use of the enterprise, such as lands, buildings, machinery, and fixtures. The remainder of the capital will be required to finance the current operations by the purchase of such items as merchandise, raw materials and supplies, and the payment of salaries and wages, pending the returns of the business.

Thus, in a manufacturing corporation, organized with a paid-in cash capital of $100,000, the permanent plant might require the expenditure of $80,000 of the capital, leaving a balance of cash, not expended on the permanent plant, of $20,000. It will be obvious that some amount of cash should be left over, after the purchase of the real estate, plant and other equipment necessary to carry on the manufacturing operations, for such a plant cannot be run without the purchase of raw materials and supplies, and the payment of labor, the returns for which will be delayed through the time consumed in manufacturing the product, marketing it, and collecting therefor.

The assets thus invested, or sunk, permanently in the undertaking are known as **Capital Assets,** sometimes called **Permanent Assets** or **Fixed Assets.** In the construction of a Balance Sheet to display the financial condition of a corporation, or of any organization of considerable size, it is customary to group such assets under the caption of Capital Assets, as a first division on the asset side of the Balance Sheet, listing the assets and carrying out the total.

In addition to permanent investments in land, buildings, machinery and similar assets, investments may be made in the securities of other companies engaged in similar lines of business. When it is the intent to invest the capital permanently in such securities, it is convenient to state them as **Investments in Other Companies,** as a division of the Capital Assets. It is often expedient, however, to make a separate classification of such assets, not including them in the Capital Assets, but stating them as a distinct classification immediately after the Capital Assets. If minority interests only are owned in such companies, the shares may be considered a temporary, rather than a permanent, investment of the capital, and, in addition, a company may be liquidated and the investment returned without the power on the part of the owner of the minority shares to prevent such action. In the case of companies controlled by the ownership of all, or a majority, of the shares of stock outstanding, the best method is to present the actual assets and liabilities of the companies in a Consolidated Balance Sheet, with the stockholdings eliminated, as will be explained later.

As distinguished from the Capital Assets, those that are held in realized form, such as cash, or are held merely for the purpose of realization, such as raw material, inventory, bills receivable and accounts receivable, are known as **Current Assets,** sometimes called **Quick Assets, Floating Assets,** or **Liquid Assets.** The term **Cash Assets,** sometimes used to designate Current Assets, is apt to be misleading, and is therefore a less desirable term. The Current Assets are listed under that caption below the Capital Assets, and the total is carried out under the total amount of the Capital Assets.

The Current Assets, strictly, are those in realized form or those held only for realization. In the case of amounts that stand to the debit of ledger accounts that represent a transient benefit or favorable effect upon the business, to be received in a future period, such as advertising paid for in a period before its effect is enjoyed, a **deferred charge to profit and loss** exists, although it stands, for the moment, as a nominal asset upon the books. Evidently, such Deferred Charges are not Capital Assets, and, not being held for realization, are not Current Assets, even though some value might be recovered, as in the case of prepaid insurance. It is best to segregate such items from the Current Assets, and list them under the caption of Deferred Charges in a final division on the asset side of the Balance Sheet.

An **accrued asset** is one that has accrued, but is not due, such as interest that has accumulated upon a bond, but that does not become collectible until a subsequent date. Accrued assets are, in the accounts

of some corporations, classed as **Deferred Assets,** on the theory, apparently, that they constitute a distinct class. This is not justified by the facts, because the amount of a note due to be paid to the company in three months, classed as a Current Asset, is analogous to an amount of accrued interest that will likewise be due to be paid in three months. Such an asset should, therefore, be classed as a Current Asset.

A wasting asset is one that is consumed with the progress of the business or the effluxion of time. For example, a mine contains an aggregate amount of mineral, and every ton taken out during the progress of the work diminishes to that extent the amount available. Its wasting does not depend upon the effluxion of time, but upon the actual mining operations. When the mine is entirely worked out, its value is extinguished, and even the machinery and appliances, in such a case, would have little or no residual value. If it is desired to keep the capital of the corporation intact, that part of the proceeds of each ton that represents the capital cost must be retained and not distributed in dividends. It is quite usual, however, to distribute the capital invested in the mine with the profits, mining companies forming the exception to the rule that capital cannot be returned to the stockholders in the guise of dividends. An example of a wasting asset that depreciates with the effluxion of time, regardless of use, is a prepaid lease of land for a term of years. In fact, any asset that wastes through use or the effluxion of time may be said to be a wasting asset, and is properly classified as a Capital Asset. It should be carried at the amount of the value remaining, estimated conservatively on the basis of the best data obtainable.

Assets enter mains are defined to be assets in hand, such as the property that comes into the possession of an executor or trustee for the purpose of meeting the immediate claims against the estate in his charge. The use of the term is rare except in the transactions of executors or trustees.

In law, the term **legal assets** denotes those that constitute a fund for the payment of debts accrued at their legal maturity, and **equitable assets** are those that can be obtained only through an action in an equity court. These terms are not used in the Balance Sheet classifications.

Capital Liabilities and Current Liabilities.

In the conduct of an enterprise, it may be desirable or necessary to incur financial liabilities through the purchase of merchandise, materials and other property on credit, by the borrowing of money upon promissory note or bond, or through one of the many other channels that present themselves in the regular course of trading or operating.

The financial liabilities thus incurred are classified, as a general rule, according to the length of time for which they run. The long-time liabilities, such as an issue of bonds secured by mortgage upon real estate and plant, and the other liabilities the maturity of which extends beyond a certain length of time, are known as **Capital Liabilities,** sometimes called **Permanent Liabilities** or **Fixed Liabilities.**

In addition to the long-time liabilities, it is customary, in the case of a corporation, to include Capital Stock in the Capital Liabilities. Capital stock is not a liability, and does not fall due to be paid at any time or in any amount. It represents ownership merely, divided into share units, and, plus any credit for profit or surplus undisturbed, or less any loss incurred, it measures the book value of the investment to the owners. Its inclusion, therefore, with Capital Liabilities, however, customary associates unrelated elements. The total, however, is an amount of capital that, under usual conditions, will remain in the business, and need not be met from current assets.

The Capital Liabilities are listed and stated as the first group on the right side of the Balance Sheet, the total amount being carried out. The Capital Liabilities are thus displayed in opposition to the Capital Assets, although there is not necessarily any close relation as to amount. The classifications are as to character of assets and liabilities, and the character of both changes as business expediency requires their change from one to another.

The short-time liabilities, such as accounts payable, and bills and notes that fall due within a certain time limit, are known as **Current Liabilities,** sometimes called **Quick Liabilities** or **Floating Liabilities.** Current Liabilities are listed on the Balance Sheet under the caption Current Liabilities, and the total amount carried out under the total amount of Capital Liabilities. This displays the Current Liabilities in opposition to the Current Assets, and a comparison of the respective totals affords one of the most valuable guides as to ability of the undertaking to meet its immediate liabilities.

The distinction between Capital Liabilities and Current Liabilities rests solely upon time of maturity. A fifty-year bond, or even a ten-year bond, will be classed immediately as a Capital Liability, and a sixty-day note as a Current Liability. Between the two lies the line of demarcation, and its exact location will depend upon the nature of the business. It may be, in many instances, that all liabilities that fall due within the period of time for which banks discount commercial paper should be classed as Current, and those that extend beyond that period as Capital.

If a Capital Liability, by the effluxion of time, comes within the limit, it is truly a Current Liability, although it might be unusual so to class it, for it must be paid or renewed. This is obvious when it is remembered that the object of the classification of Current Liabilities is to state for ready reference the liabilities that must be paid or renewed within a certain time. A Capital Liability that cannot be renewed becomes as much a Current Liability as a short-time note that is due and cannot be renewed, and merely because Capital Liabilities most frequently are renewed does not change the theoretical classification.

The attempt is sometimes made to classify the liabilities on the basis of the use of their proceeds, the theory being advanced that Capital Liabilities produce Capital Assets. The error of this is plain in the case of a corporation, with a paid-in capital of $100,000, invested in plant, that finds it necessary to mortgage its plant to secure $25,000 of funds for the purchase of Current Assets, or for the liquidation of liabilities incurred through the purchase of such assets. The liability would be classed, if it secured a long-time loan, as a Capital Liability notwithstanding the fact that the proceeds were used to provide Current Assets. The fact is, the conversion of assets from one form to another is a matter of business expediency, and, subject to mortgage conditions, is made regardless of form or time of liabilities. The proceeds might even be lost, in whole or in part, without changing the nature or the amount of the obligation.

The payment of Capital Liabilities is usually secured in some formal way, as by mortgage on real estate and other property. The aggregate of such liabilities is known as **Funded Debt,** from the custom of funding short-time obligations into long-time bonds or notes, secured by mortgage or other indenture. The interest, definite in amount, and recurring regularly, is known as **Fixed Charges.** In railroad accounting, rentals under long-time leases of property, and sometimes taxes, are included in Fixed Charges.

An **accrued liability** is one that has accumulated, but is not due to be paid. Such a liability is properly classified as a Current Liability. The distinct classification of **Deferred Liabilities** is undesirable for the reason given for excluding Accrued Assets from the classification of Deferred Assets.

A **contingent liability,** as the term indicates, is one that may, or may not, become an actual liability, definite in amount. A contingent liability arises in the endorsement of a note or bill discounted, unless liability is specifically avoided by the form of endorsement. Another example is the possible liability upon suit for damages for personal injuries, or otherwise. Contingent Liabilities are shown in memorandum form on

the Balance Sheet as a distinct classification, usually following the Current Liabilities, but without definite figures carried out. The maximum amount of each class of contingent liability, when it can be ascertained, should be stated in the memorandum.

Surplus.

If the total amount of asset value, correctly stated, exceeds the combined amount of capital stock and liabilities, a surplus exists. Surplus appears on the credit side of the accounts, either in one account, or in two or more accounts, such as Surplus, Undivided Profits or Profit & Loss.

Dividends declared should appear in a Dividends Payable Account, and, being an account payable, the collection of which can be enforced by the stockholders, should be classified with the Current Liabilities.

The real book investment in the corporation is the sum of the capital stock and the surplus, and, in contemplation of a dissolution of the corporation, the two merge, for each stockholder would be entitled to his pro rata share of the assets after liquidation of the liabilities, whether the amount was more or less than the par of his stock.

From the viewpoint of the corporation as a going concern, however, there is a distinction between capital stock and surplus, in that the latter may be paid to the stockholders in dividends, while the capital stock may not be returned except upon formal dissolution. A useful purpose may, therefore, be achieved by stating the facts so that the distinction is apparent.

The surplus is displayed as a final division on the right side of the Balance Sheet, divided into as many items as may be desirable, the total being carried out to the amount column. If a departure can safely be made from the established custom, the capital stock may be displayed in conjunction with the surplus, the total carried out disclosing the entire capital investment of the undertaking. It is far more usual, however, to carry the Capital Stock into the Capital Liabilities.

In the case of a **deficit,** that is, an amount by which the combined capital stock and liabilities exceeds the amount of assets, correctly stated, there will be no surplus and the deficit appears as a debit balance. It is displayed as a final amount on the left side of the Balance Sheet, the Deferred Charges, in such a case, immediately preceding it. If it were desirable to show the real capital investment, the deficit might be deducted from the amount of capital stock on the right side, although this is unusual.

In case a Balance Sheet has been prepared and published in one form for years, or in case the established custom requires a certain form,

as is apt to be the case in public service corporations, the accountant is frequently under the necessity of yielding, after presenting his own views as to display, to such established usage. So long as the essential facts are disclosed, the accountant is justified in sacrificing, to some extent, his views on matters of technique.

It is not intended, at this point, to consider fully the principles underlying the valuation of assets, but it must be borne in mind that the amount of invested capital, as disclosed by the capital stock account and the surplus or deficit account, is dependent upon such valuations; and that values fixed on the basis of a going concern differ from those fixed on the assumption of a realization. It follows that, as a practical matter, capital stock furnishes little beyond units of ownership as a basis for the distribution of whatever profit there may be available for dividends, and as a basis for the distribution, upon dissolution, of whatever is left after liquidation of liabilities.

Working Capital.

The excess in the amount of the Current Assets over the amount of the Current Liabilities is the Working Capital of the enterprise, being the net amount of asset value available for carrying on the current operations of the undertaking. In the example of the manufacturing corporation before given, with a capital stock of $100,000 and an investment of $80,000 in permanent plant, the Current Assets consist entirely of cash, $20,000, and there being no Current Liabilities, the Working Capital of the corporation is $20,000. Working Capital does not appear as an account with a balance, but its amount is determined from classifying the Current Assets and the Current Liabilities, and determining the excess of the former over the latter.

The proportion of Working Capital to the entire amount of capital invested varies with the different lines of business, and even with the individual undertakings in the same line of business, according to prosperity and the views of different managements. In the case of collection of money in advance for goods sold or services rendered, little or no Working Capital is required, because the necessary funds for carrying on the operations are advanced by the persons to whom the product is sold, or for whom the services are rendered.

Thus, in the case of a railroad, a small percentage of Working Capital is required for the reason that a large part of the tolls for the services rendered, both in transporting property and persons, is collected in advance by the railroad company. In addition to the payment in advance thus secured, a railroad company often pays its employees monthly, and some-

times not until the 10th or 15th of the month succeeding the one in which the services are rendered; and, through its financial responsibility, it is able to secure a longer period of credit for its supplies than would otherwise be possible. In these respects it occupies a peculiarly fortunate position in regard to the necessity for Working Capital, collecting largely in advance and taking advantage of long-time credit.

As contrasted with this, a concern that sells on long time, for example, an undertaking that manufactures sewing machines that are sold directly to the consumer on time extending from one to two years, to be paid in instalments, must have a very large proportion of its capital free for financing the current operations. An initial Working Capital, unless of liberal proportions, would soon be converted into accounts receivable, the collection of which would extend over long periods of time. The loss of interest thus incurred must, of course, be compensated by a larger selling price of the product than would otherwise be necessary.

In examining the Balance Sheet of a business for the purpose of extending credit or otherwise, the first consideration, as a rule, is to determine whether the Working Capital is sufficient for the needs of the particular business. If the condition is unfavorable in this respect, the negotiation of a short-time loan, or an advance, does not change the situation so far as the Working Capital is concerned, for the reason that while the Current Assets increase to the extent of the amount of the loan, there must be set up a Current Liability for the same amount. The only effect of such a procedure is to provide funds to pay the most pressing of the Current liabilities, at the expense of setting up others to come due a little later. If sufficient Working Capital does not exist, the situation can be relieved permanently only by the direct contribution of additional capital by the proprietors, or by the indirect contribution through earnings that are not withdrawn but left in the enterprise for the purpose of providing the necessary additional capital.

The case often happens that sufficient Working Capital will be in the undertaking at the commencement, but through the need for increasing the plant, the Working Capital is sunk in the permanent plant, thus creating an unfavorable condition as to the Working Capital available for the enterprise. Thus, in the case first cited, in which $20,000 of Working Capital was available in the first instance, if the legitimate additions to the plant should cost $25,000, making a total charge to that account of $105,000, and no additional capital had been contributed, or allowed to remain in the undertaking from profits secured, there would have been an excess of Current Liabilities over Current Assets of $5,000, instead of a Working Capital of $20,000. If a mortgage, securing a long-time

loan, that could fairly be classed as Capital Liability, had been placed upon the permanent plant, it would have relieved the situation to the extent of the funds, and for the time of the loan, thus secured. If a renewal of the loan could be made at its expiration, upon the same security, the Current Assets would not be needed to meet the liability, and the Working Capital would remain intact. The only unfavorable effect as to the current operations from such a procedure would be the interest charge on the loan, that would have to be made from earnings.

Capitalization.

In determining the capitalization of an enterprise, no better general rule can be laid down than it should have as capital the amount of funds with which the business can be most economically conducted. Thus, if a corporation is organized with a capital of $100,000, which is sufficient for its needs eleven months of the year, but during the twelfth month it needs an additional $50,000, it might be more economical for the corporation to borrow the $50,000 for the month than to carry permanently a capital of $150,000, a third of which would be idle or invested at a low rate of interest for eleven months of the year. In such a case, granting that the loan of $50,000 could be effected beyond reasonable doubt, the capital of the corporation should doubtless be $100,000.

In the case of the incorporation of an enterprise with a capital of $100,000, in which $150,000 of capital was permanently needed, the funds might be obtained by placing a mortgage for $50,000 upon the permanent property of the undertaking. Assuming that such a loan could be renewed upon its expiration by repledging the same assets, the funds secured by the loan would be available for the purposes of the corporation, without recourse to the current assets. It is obvious, however, that such financing is not as conservative, aside from the fixed interest charge involved, as where the entire amount of capital needed is supplied by the proprietors by stock issues. In the latter case, there is a liberal borrowing capacity available in the times of financial necessity that are reasonably sure to come to every enterprise, no matter how well managed. In industrial corporations, the difficulty of renewing capital liabilities is apt to be great in times of commercial depression. In public service corporations, it is more usual to find the permanent plant mortgaged heavily, because in the nature of such corporations the enterprise continues indefinitely, and under ordinary business conditions, the renewal of such loans can be made without difficulty.

Granting sufficient capital in the first instance to provide the necessary permanent plant, and a reasonable amount of working capital, it

may be found necessary, through increased business, to increase the permanent plant, and this is frequently accomplished by the sale of long-time securities, such as bonds secured by a mortgage on the property. The work of improvement may be well under way, and a part of the securities sold to defray the cost thereof, and then difficulty may be encountered in disposing of the remainder of the bonds. In such a case, it not infrequently happens that the work of improvement cannot be altogether stopped and is carried on out of funds secured by short time loans, the intention being to convert such short-time loans into a bond issue as soon as the market conditions permit. This condition becomes dangerous in the event of a depression, for the short-time loans may have to be paid without an opportunity to convert them into the long-time issue. The corporation may thus be forced into insolvency and a receivership.

Insolvency may result from the lack of sufficient cash funds to meet maturing obligations, even though the enterprise may technically have a surplus of assets over liabilities, or even a surplus of assets over combined liabilities and capital stock. The mere possession of a credit to the Profit & Loss Account or Surplus Account does not necessarily indicate that funds are available to meet maturing obligations, for the profits may be invested in the permanent plant, or tied up in current operations in such a way that they cannot be realized upon for the purpose of meeting obligations. In the same way, and for the same reason, a corporation may have a profit and still be unable to pay a dividend, through lack of cash with which to make the payment.

Illustrative Balance Sheet.

For the purpose of illustrating the distinctions that have been made, the accounts of the manufacturing corporation, with a paid-in capital of $100,000, heretofore mentioned, will be used. The post-closing Trial Balance at the close of the second year's business was as follows:

THE AMERICAN MACHINE CO.

Post-Closing Trial Balance as at December 31, 1904.

Capital Stock		$100,000
First Mortgage 20-Year Bonds		25,000
Land	$10,000	
Buildings	30,000	
Machinery	55,000	
Reserve for Depreciation of Buildings		1,500
Reserve for Depreciation of Machinery		2,750
Reserve for Losses on Accounts Receivable		425
Organization Expense (⅔ written off)	1,000	
Accounts Receivable	42,500	
Bills Receivable	12,000	
Cash	5,500	
Inventory of Stores and Labor	7,500	
Inventory Finished Stock (Cost)	9,000	
Accounts Payable		19,500
Bills Payable		15,000
Dividend Payable Jan. 2, 1905		4,000
Undivided Profits		4,325
	$172,500	$172,500

The simplest rule in Balance Sheet construction, in corporations, is to display the assets in the order of their probable realization, beginning with the slowest, and the liabilities in the order of their probable liquidation, beginning with those maturing last. Following this rule, the facts would be displayed as under:

(Deficient in Technique)

THE AMERICAN MACHINE CO.

Balance Sheet as at December 31, 1904.

Assets.		*Liabilities.*	
Organization Expense	$1,000	Capital Stock	$100,000
Land	10,000	First Mortgage 20-Year Bonds	25,000
Buildings	30,000	Accounts Payable	19,500
Machinery	55,000	Bills Payable	15,000
Inventory of Stores and Labor	7,500	Dividend Payable, Jan. 2, 1905	4,000
Inventory of Finished Stock	9,000	Reserve for Depreciation of Buildings	1,500
Accounts Receivable	42,500	Reserve for Depreciation of Machinery	2,750
Bills Receivable	12,000	Reserve for Losses on Accounts Receivable	425
Cash	5,500	Undivided Profits	4,325
	$172,500		$172,500

The above Balance Sheet falls short of technical perfection in that the net amount at which the Buildings, Machinery and Accounts Receivable are taken into the Balance Sheet can be determined only by an arithmetical deduction of the respective reserves, a process that should be carried out in the construction of the Balance Sheet.

It is technically defective in that the investment in plant and machinery is not shown in total, so that its relation to the Capital Stock and the current assets may be grasped.

It is technically defective in that the current assets and current liabilities are not shown in their respective total amounts, so that their relation to each other, and its effect upon the business, cannot be ascertained without additions.

It is technically defective in that under the caption **Liabilities** appear items that cannot properly be so classified.

It is technically defective in that the amount of capital that may reasonably be expected to remain in the enterprise cannot be determined without an arithmetical calculation.

In short, it amounts to little more than a post-closing trial balance, and does not fulfill the accounting requirement that, in the Balance Sheet, the facts of the post-closing trial balance must be rearranged, classified, condensed, and set forth in a way that will convey the greatest amount of information.

The technical defects may be overcome by recasting the Balance Sheet in the form generally adopted by accountants, as follows:

(Customary Accounting Technique)

THE AMERICAN MACHINE CO.

Balance Sheet as at December 31, 1904.

Capital Assets.				*Capital Liabilities.*		
Land			$10,000	Capital Stock		$100,000
Buildings		$30,000		First Mortgage 20-Year Bonds		25,000
Less Reserve for Depreciation		1,500				
			28,500	Total Capital Liabilities		$125,000
Machinery		$55,000				
Less Reserve for Depreciation		2,750				
			52,250			
Total Capital Assets			$90,750			
Current Assets.				*Current Liabilities.*		
Inventories:				Accounts Payable	$19,500	
Stores and Labor	$7,500			Bills Payable	15,000	
Finished Stock	9,000			Dividend Payable, Jan. 2, 1905	4,000	
		$16,500				
Accounts Receivable	$42,500			Total Current Liabilities		38,500
Less Reserve for Losses	425					
		42,075				
Bills Receivable		12,000				
Cash		5,500				
Total Current Assets			76,075			
Deferred Charges.				*Surplus.*		
Organization Expense (⅔ written off)			1,000	Undivided Profits		4,325
			$167,825			$167,825

It can be seen at a glance from the above statement that the funds supplied from stock issue and mortgage bonds amount to $125,000, out of which $90,750 is sunk in the plant, leaving $34,250 as working capital from this source. Adding the surplus, amounting to $3,325 after deducting the deferred charge, gives an aggregate working capital of $37,575. A more direct way to obtain the same information is to deduct from the total amount of current assets, $76,075, the amount of current liabilities, $38,500, leaving the same amount as achieved before, $37,575.

It is obvious that the current assets, out of which current liabilities must be met, are about as 2 to 1, although about one-half of the excess is in inventories, the slowest of the current assets, and that $4,000 of the $5,500 cash is needed immediately for dividend purposes.

It may be claimed that the inclusion of Capital Stock under the caption **Capital Liabilities** is technically incorrect, but the customary technique is adopted for reasons heretofore given.

There can be no better rule of technique than that accounting statements should be constructed in such a way that the maximum amount of information may be gained by the layman with the least expenditure of effort.

Advanced Theory and Practice of Accounts.

ORGANIZATION AND FINANCE.

By HOMER ST. CLAIR PACE, C. P. A.

CORPORATIONS—LECTURE IV.

REVENUE OR INCOME.

ADVANCED THEORY AND PRACTICE OF ACCOUNTS.
ORGANIZATION AND FINANCE.

BY HOMER ST. CLAIR PACE, C. P. A.

CORPORATIONS—LECTURE IV.

REVENUE OR INCOME.

In General.

The term **revenue** has two commonly accepted uses. It is used, first, to designate the income of a government, or a division of a government, arising from the imposition and collection of taxes, duties, etc. Hence, the use of the term **revenues** to describe the total of such income. The term may also, but not necessarily, in the case of a government, include the proceeds of the sale of stocks, lands or other property.

The term **revenue** is used, secondly, to designate the income of organizations other than governmental bodies. It is a generic term, embracing all profits, returns, rents, interest, issues, earnings and income, received, or the right to which has accrued or been gained, irrespective of the designation that may be applied to such element in the specific undertaking.

Thus, in a mercantile concern, the excess of what is obtained over the cost of obtaining it is known as **profit.** In case the excess of the selling price over the cost price of the goods sold is called **gross profit,** the balance that is left, after deducting all other costs incurred, is known as **net profit.** It will be obvious that **profit** and **net profit** are the same, the latter term being used in contradistinction to **gross profit.**

In the business of the transportation of property and persons, the aggregate received for the services rendered is known as **gross earnings.** After deducting therefrom the direct costs of operation, but excluding rentals, interest, and, in some cases, taxes, the balance is known as **net earnings.** After deducting the rentals, interest and other charges not before taken into account, a balance, known as **net income,** available for distribution as profit, is obtained.

In the case of organizations maintained for purposes other than profit, as, for example, a club, the dues and collections applicable to the payment of running expenses and the maintenance of property, are known as **revenue** or **income.** Inasmuch as the term revenue may originally have implied a return or rent, instead or an assessment, its application to non-profit organizations, that collect from their members the amounts necessary for their purposes, may be questioned. However, the idea of a return does not enter into its common use to denote governmental income, and its use to designate the income of non-profit undertakings should hardly be barred on this account.

In the accounts of an estate, the returns from the use of the property are known as **income.**

The illustrations could be multiplied, but enough have been given to indicate that various terms and distinctions develop and are used in different classes of undertakings. The term revenue is broad enough to embrace all.

It should be noted, however, that the term **income** has a common use as a generic term, covering everything that is embraced in the term **revenue.** It is probably a fact that **income** is more frequently used by legal writers and courts, while **revenue** is more commonly employed by accountants and corporation officials. So far as published definitions are concerned, it would appear that the term **revenue** is used chiefly to describe the **income** of a government, while the term **income** is most frequently applied to the **revenue** of private concerns. Enough has been said to indicate the interchangeability of the two terms.

In this Lecture it is intended to consider, in detail, the subject of revenue or income as it applies to organizations other than governmental bodies.

Real and Nominal Distinctions.

In conducting an enterprise under ordinary conditions, a portion of the capital will be invested in capital assets, held for the permanent needs of the concern. The remainder, whether held in cash, or partly or wholly converted into assets that are to be turned over, will constitute the current assets. There may be liabilities, classified, according to their time of maturity, into capital liabilities and current liabilities. There will be a capital account or accounts, disclosing the amount of investment or ownership. In the assets and liabilities will be included the personal accounts, with which the capital account, showing accountability to the owners, is classified. All of the elements enumerated may be classified as **real.**

As distinguished from the foregoing, the accounts that are raised to record revenue, embracing all returns, profits and income, and the expenditures or charges that are properly offset to such gross revenue, may be said to contain **nominal** elements, or those that exist in name only, raised for the purpose of measuring, for a definite period, increases and decreases of assets and liabilities. Their nominal nature may be seen from the fact that, having served their statistical purpose, the elements may be canceled against each other and permanently closed.

Exception may be taken to the inclusion of the capital, or ownership, account as a real element, on the ground that it only measures a net asset value, and is not itself that value. However, it measures a real fact as to proprietorship, while a true nominal element may be offset and closed from the books. The balance that remains after the nominal accounts have been offset becomes, in the case of a profit, a real element of accountability to the owners. An ordinary liability is a sufficiently real element, although it but measures an amount that, theoretically, must be satisfied from the assets contra.

The distinction between the real and nominal elements is important in determining net revenue or income, because the cost of an expense, charged to an asset account and allowed to remain therein, overstates the net revenue to its extent, and charging the cost of an asset, the value for which remains, to revenue, results in an understatement, to its amount, of the net revenue.

An illustration of a distinction between **capital** and **revenue** expenditure is furnished in the case of a railroad company that is renewing 75-pound steel rail with 100-pound rail. The original steel, and the track, should be maintained by charges to revenue. Therefore, only the excess weight of 25 pounds is a proper charge to capital. The charge to revenue for the 75-pound renewal, would be reduced by a credit for the residual value in the steel removed. The curious condition of such residual value being in excess of the cost, so that the renewal is made at a profit, has been known to occur through fluctuations in the values of steel.

An instance of an incorrect distinction may arise, for example, in the case of the salary of an engineer, whose time is divided equally between maintenance work and new construction, but which is charged to capital. It would properly be divided one-half to each. Such an erroneous distribution would overstate net revenue to its amount, and load capital assets with an operating expense.

Expenditure.

An **expenditure** is an amount paid, or to be paid, and may result in the acquisition of an asset, in which case it is a **capital expenditure,** a **capital outlay,** or, as it is sometimes called, merely **outlay;** or an **expenditure** may result in a cost or expense, chargeable against revenue, in which case it is called a **revenue expenditure.**

The use of the word **expenditure** in the term **Statement of Revenue and Expenditure,** or **Statement of Income and Expenditure,** obviously refers to amounts paid, or to be paid, that are a charge against gross revenue or income. **Expenditure,** like the term **expense,** may apply to an actual **payment** or **disbursement** of cash, or to a **liability incurred,** to be paid later. Unlike expense, however, it may apply to capital as well as to revenue.

While a capital expenditure, strictly, is one for which asset value to the extent of its amount remains, in practice the terms **outlay, capital outlay,** or **capital expenditure,** are used only to denote an expenditure made for the betterment of the permanent assets with a view to increasing the earning capacity. The strict definition would include, therefore, the purchase of merchandise, or similar current assets, to be used in the revenue end of the business. The latter, in accepted practice, despite the strict definition, would be classed as a revenue expenditure in the same way as insurance paid in advance. The unused values would be considered more in the nature of deferred charges to a revenue or income account of a later period.

Principles of Valuation.

In view of the well-settled principle in accounting that the profit shall be stated as the net amount earned, and inasmuch as its determination depends, after the deduction from revenue or income of the direct expenses, upon the proper valuation of assets and upon proper estimates of the shrink in realization upon those that are held for realization, a full consideration of these subjects is desirable.

The income itself is credited, if, during the period, it is earned, accrued or gained, irrespective of its actual receipt in money or its equivalent.

The **direct** expenses, such as wages, salaries, rents and insurance, the benefit of which applies to the period for which the gross income is taken into account, whether actually paid in cash during the period or not, are deducted from, or charged against, such gross income.

So far as the assets of an enterprise are concerned, they will consist, as has been pointed out, partly of capital assets, or those that are more or

less permanent in their character, by the use of which the business is carried on, but which are not acquired or held for the purpose of realization. Thus, land may be acquired and a building erected thereon for the use of an enterprise. If the asset is one that depreciates, that is, becomes of less value through use or the effluxion of time, as would be the case with the building mentioned, such depreciation, being an inevitable accompaniment of the returns or profits made through the use of the building, would be a deduction therefrom. The principle is that the capital assets should be kept intact out of revenue.

This means not merely that the asset, be it machinery, buildings, or other asset subject to depreciation, shall be kept in condition for use by repairs, but that there shall be an amount withheld from the returns that will be sufficient ultimately to replace the asset when it has become obsolete through changed conditions, inventions, or otherwise.

Subject to being kept intact out of revenue, the capital assets should be valued at their cost. Their realizable value, in view of the fact that they are not purchased or held for realization, should not be considered. Thus, in the case of the land mentioned, the fact that similar tracts are selling for more or less should not affect the profit-making capacity and showing of the concern using the land. The land was, presumably, worth, as a part of the necessary equipment, its cost, and not being subject to depreciation, its value may ordinarily stand at its cost.

In special cases, appraisements and revaluation are necessary in order to bring the state of the accounts more nearly into accordance with conditions, but in such cases the fluctuations should not be allowed to obscure the trading or operating results.

There is a distinction between the valuation of assets upon the basis of a going concern, that is, one that is to continue in business, and one that is to be realized and liquidated. An asset may be worth its full cost to a concern for its particular business, and still have a realizable value of only part of such cost. So long as the intention and ability to continue business exist, the cost, subject to proper allowances for repairs and depreciation, is the proper basis of valuation.

In the case of the realization of a capital asset, the profit or loss is treated as any other profit or loss, except that care should be taken to avoid confusing it with trading or operating results. Pending realization, appreciation may better, in the majority of cases, be disregarded.

Current assets, unlike capital assets, are held for realization only. Their worth consists not in their peculiar adaptation to the undertaking, but in what they will produce upon realization. Thus, accounts receivable are carried as assets at their estimated collection value, the estimated

loss being provided for by a reserve account, to which the losses, as made, are charged. Inventories of material are stated at cost, or market price, whichever is lower. Throughout, conservative action is required in order to avoid an overstatement of profit, a much more unfortunate occurrence, from an accounting viewpoint, than an understatement.

Losses or expenses that must be charged against revenue on account of adjustment of asset values, may be designated as **indirect** charges. They are as properly chargeable as the direct expenses, but present the distinction that their amount is dependent, to a large extent, upon judgment. They, therefore, present to the accountant the opportunity for the exercise of ability of a higher order than is called for in the determination and deduction of the items of direct expense.

Elements of Income.

The Statement of Revenue & Expenditure that would be constructed upon the principles given would present elements as under, although the technical arrangement, in practice, would be different:

BLANK & BLANK

STATEMENT OF REVENUE (OR INCOME) & EXPENDITURES FOR YEAR ENDING DECEMBER 31, 1904.

REVENUE (OR INCOME).		
Gross Revenue (**or Income**) including all increment through trading or operating, whether actually received in cash or not........................		$ 0
EXPENDITURES.		
Direct Expenditures, whether actually paid in cash or not.	$ 0	
Indirect Expenditures, including adjustments upon realizable assets and provision for maintenance of capital assets....................................	$ 0	$ 0
Balance, Net Revenue, Income or Profit		$ 0
Extraordinary Income or Expenditure........		$ 0
Total.......................................		$ 0

Illustrative Income Accounts.

For the purpose of placing before the student, for study, the income accounts of large corporations, three selections have been made, all of which have been prepared and published in the report, or running form. It is not intended to approve or disapprove the form in any of the cases, but the object is to reproduce, from practice, statements in which the attempt has been made to meet the various essentials of an income account.

GUANAJUATO CONSOLIDATED MINING AND MILLING COMPANY

STATEMENT OF PROCEEDS AND EXPENSES

January 1 to December 31, 1907

Bullion, Concentrates and Shipping Ore		$673,341.52
Cost of Mining, Milling and Cyaniding		385,919.61
		$287,421.91
Treatment Charges on Concentrates and Shipping Ore	$59,116.69	
Bullion Expense, including State and Federal Taxes	20,628.96	79,745.65
Net Proceeds		$207,676.26
Income from Other Sources		1,686.97
Total		$209,363.23
Taxes on Minor Properties, Legal Expense, Transfer, Registrar, Salaries, Maintenance of West Virginia Office, etc.		19,433.42
Profit for the Year 1907		$189,929.81
Deduct: Bond Interest paid out		20,156.69
Leaves Net		$169,773.12

CORN PRODUCTS REFINING COMPANY

Income Account

Year Ending February 28, 1910

Profits from Operation		$3,437,317.81
Interest on Loans, Deposits and Overdue Accounts		74,842.55
Interest and Dividends on Securities Owned		52,023.33
Rentals from Real Estate—Not Used in Operation		10,297.23
Total Income		$3,574,480.92
Deduct:		
Interest on Bonded Debt	$374,302.90	
Interest on Borrowed Capital	22,095.13	
Taxes	102,878.70	
Insurance	103,145.30	
Miscellaneous Expenses	22,575.48	
Reserve for Profit-sharing	175,000.00	
Depreciation on Properties	382,547.14	
Discounts on Bonds Sold	250,000.00	
Reserve for General, State and Corporate Taxes	70,000.00	
Total Deductions		1,502,544.65
Net Income for Year		$2,071,936.27

UNITED STATES STEEL CORPORATION AND SUBSIDIARY COMPANIES

Condensed General Profit and Loss Account

For Year Ending December 31, 1909

Gross Receipts—Gross Sales and Earnings		$646,382,251.29
Operating Charges, viz.:		
Manufacturing and Producing Cost and Operating Expenses, including ordinary maintenance and repairs and provisional charges for depreciation	$507,136,156.19*	
Administrative, Selling and General Expenses, and Employees' Bonus Funds (not including general expenses of transportation companies)	15,460,613.78	
Taxes (including allowance for corporation excise tax)	8,704,193.39	
Commercial Discounts and Interest	3,621,613.12	
	$534,922,576.48	
Less, Amount included in above charges for provisional reserves for depreciation now deducted for purpose of showing the same in separate item of charge, as see below	23,718,313.98	
		511,204,262.50
Balance		$135,177,988.79
Sundry Net Manufacturing and Operating Gains and Losses, including Idle Plant Expenses, Royalties received, Adjustments in inventory valuations, etc.	$2,424,787.61	
Rentals received	960,594.63	
		3,385,382.24
Total Net Manufacturing, Producing and Operating Income before deducting provisional charges for depreciation		$138,563,371.03
Other Income		
Net Profits of Properties owned, but whose operations (gross revenue, cost of product, expenses, etc.) are not included in this statement	$672,646.55	
Income from Sundry Investments and Interest on Deposits, etc.	2,759,970.08	
		3,432,616.63
Total		$141,995,987.66

* Includes charges for ordinary maintenance and repairs, approximately $35,000,000.

Total, brought forward		$141,995,987.66
INTEREST CHARGES		
Interest on Bonds and Mortgages of the Subsidiary Companies	$7,728,822.79	
Interest on Purchase Money Obligations and Special Deposits or Loans of the Subsidiary Companies	158,355.39	
		7,887,178.18
Balance, being the aggregate earnings of the several companies for the year before deducting provisional charges for depreciation		$134,108,809.48
Less Net Balance of Profits earned by subsidiary companies on sales made and service rendered account of materials on hand at close of year in purchasing companies' inventories, and which profits have not yet been realized in cash from the standpoint of a combined statement of the business of the U. S. Steel Corporation and subsidiary companies		2,617,395.54
Earnings for the Year 1909, per Income Account		$131,491,413.94
Less Allowances for various Depreciation Funds		23,718,313.98
Net Earnings in the Year 1909		$107,773,099.96

Advanced Theory and Practice of Accounts.

ORGANIZATION AND FINANCE.

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CORPORATIONS—LECTURE V.

DIVIDENDS.

PACE & PACE
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CORPORATIONS—LECTURE V.

DIVIDENDS.

In General.

Private corporations may be considered in two general classifications, viz.:

1. **Non-Stock Corporations,** or those organized for purposes other than profit, such as a library or a religious corporation:

2. **Stock Corporations,** or those organized for the purpose of profit, such as a mercantile, manufacturing, banking or railway corporation.

The non-stock corporations are included in the classification, for the sake of completeness. While it is not the present purpose to discuss this class fully, it may be said briefly that their revenues consist of dues, assessments, donations, or other income, the amount being large enough, presumably, to meet all running expenses, and at least to maintain intact the property of the corporation. The excess, if any, accumulates for the benefit of the organization. The deficit, if any, impairs to its extent the property. The statement to disclose the facts should disclose the gross income, showing by suitable classification the sources, and as a deduction therefrom, in sufficient detail, the charges and allowances that belong properly to the period for which the income is stated If a balance remains, it is a **revenue excess.** If the gross revenue is not as large as the charges, the difference is a **revenue deficit.**

The distribution of profit to the stockholders, sometimes called proprietors, of the stock corporations is effected by the declaration and the payment of a **dividend,** being a **pro-rata** distribution to the stockholders, usually a payment in cash, of a percentage on the par value of stock standing in their respective names at a certain date.

The principles underlying the declaration and the payment of dividends are applicable, in general, to all corporations, although there may be special statutory provisions applicable to a particular class, as, for example, banks and trust companies. It is the purpose of this Lecture to state the general rules and principles, with the New York statutes and decisions particularly in mind.

Liability of Directors for Unauthorized Dividends.

It is a well-settled principle of corporation law that dividends cannot legally be paid from capital, but must be paid from surplus profits. This proceeds upon the theory that the capital of a corporation constitutes a fund for the protection of its creditors, to which the creditors may look as they would to the personal wealth of an individual debtor. Hence, this fund can not be diminished by withdrawals by the stockholders in the guise of dividends. Except upon dissolution, or reduction in accordance with law, the capital cannot legally be distributed. Without an elaboration of this principle, which is a matter of law rather than theory of accounts, it will suffice to quote the New York statute on the subject, which not alone states the principle but imposes a penalty upon directors for violating its provisions. It is as follows:

> "**Liability of directors for making unauthorized dividends**—The directors of a stock corporation shall not make dividends, except from the surplus profits arising from the business of such corporation, nor divide, withdraw or in any way pay to the stockholders or any of them, any part of the capital of such corporation, or reduce its capital stock, except as authorized by law. In case of any violations of the provisions of this section, the directors under whose administration the same may have happened, except those who may have caused their dissent therefrom to be entered at large upon the minutes of such directors at the time, or were not present when the same happened, shall jointly and severally be liable to such corporation and to the creditors thereof to the full amount of any loss sustained by such corporation or its creditors respectively by reason of such withdrawal, division or reduction. But this section shall not prevent a division and distribution of the assets of any such corporation remaining after the payment of all its debts and liabilities upon the dissolution of such corporation or the expiration of its charter; nor shall it prevent a corporation from accepting shares of its capital stock in complete or partial settlement of a debt owing to the corporation, which by the board of directors shall be deemed to be bad or doubtful."

The ability of a corporation, therefore, to declare and to pay to its stockholders profits in the form of dividends depends upon its possession

of **surplus profits.** These have been defined to be the excess of assets, correctly valued and stated, over the combined amount of capital stock and liabilities. **Net earnings** have been defined to be, generally speaking, the " excess of the gross earnings over the expenditures defrayed in producing them, aside from, and exclusive of, the expenditure of capital laid out in constructing and equipping the works themselves."

It must be admitted that the decisions available leave much to be desired in the matter of definitions and distinctions. Thus, from the viewpoint of the accountant, the values of assets would not be correctly stated unless a reasonable allowance, based upon the facts peculiar to the specific case, were made for depreciation. It has been held, nevertheless, that such a provision for the upkeep of capital assets is not necessarily a deduction from surplus before the distribution of surplus in the form of dividends. With the recognition of the necessity for such an allowance, as evidenced by the federal act requiring depreciation to be provided for in the accounts of railroads, a different tendency in the decisions upon this interesting question may be expected. In the meantime, as a general proposition, and notwithstanding the accounting desirability of the deduction of an allowance for depreciation before the determination of surplus available for dividends, the weight of the decisions is that it is not necessary.

Realized, as Distinguished from Unrealized, Profits.

Cash is ordinarily necessary to the payment of a dividend, and its legitimate source lies in the realization of the profits from which the dividend is declared. But the condition is often found of a surplus far in excess of cash, and, in order to illustrate fully how this may arise, the principle involved, and its relation to the apportionment of profit, will be traced from partnership law and accounts to the distribution of corporate dividends.

It may be assumed that A and B form a partnership for the purpose of merchandise trading, with a capital of $10,000, contributed in cash one-half by each, the profits and losses of which are to be shared two-thirds by A and one-third by B. A revenue transaction will be studied under several possible conditions.

In the case of the purchase of goods that cost in cash $9,000, and their sale for $18,000, in cash, the gross increase in the asset, cash, would be $9,000. If all the costs incurred in carrying on this enterprise were $1,000, and were paid in cash, the net realized profit would be the amount by which the gross profit, $9,000, exceeds the amount of costs, $1,000, or $8,000.

If the $18,000 were in the form of accounts receivable, and if, according to the best judgment, every dollar of such accounts would be collected, the net profit would, in accounting practice, still be stated as $8,000, regardless of realization. Likewise, the entire expense of $1,000 would be charged against the returns, even though, as a matter of fact, a part of it had not been paid. Were the accounting practice otherwise, the **earning** for the period would be obscured by quickness or slowness in **realization** or **liquidation.** Assuming the realized basis in the case given, if no part of the accounts receivable were collected and part or all of the expense were paid, a loss would be shown, despite the fact that nothing remains to be done except to make settlements.

It is an essential to successful management, in order to fix responsibility for unsatisfactory results and to watch over and intelligently to direct the activities, that the outcome as to earnings or profits be known for successive periods. The net result of realization and liquidation is subject to so many contingencies that comparisons of results dependent thereupon are, in the majority of enterprises, valueless.

It is a rule of partnership law, however, that profits are considered as of the period in which they are actually **received,** or realized in cash, and not as of the period in which they are **earned.**

The reasonableness of this provision, as a legal rule, becomes plain, when it is remembered that, in the absence of realization, the determination of profit becomes a matter of estimate or judgment. No one in advance can definitely say what a specific asset will realize, and, therefore, in the absence of agreement, the determination cannot be reached until realization.

In practice, the result is determined upon whatever estimates may be necessary to reach a conclusion as to profit and loss. Thus, accounts receivable may be estimated to produce, upon collection, a certain percentage of their face value. The comparisons necessary to intelligent management are made, and the capital interests of the partners are adjusted by carrying the results, after taking into account the drawings, to their respective capital accounts. The interests of the partners, by agreement, express or implied, are thus determined.

In the case of A and B, assuming that no part of the accounts receivable are realized, the apportionment of two-thirds of the net profit to A, and one-third to B, is dependent upon their agreement. After such an agreement, the profit or loss that results from their realization above or below the estimated value, is divided in the same proportion as any other profit or loss.

In the same way, a corporation may have a net profit, a net income or surplus, without an equivalent amount of cash.

In the case of a profit, determined by the established accounting procedure, without the possession of cash to an equal amount, the shortage of cash would be likely to arise from one of two causes, or both, viz.:

1. Profits consisting of assets in unrealized form, which would be an ordinary condition;

2. Capital expenditure from realized profits, which is especially likely to happen in certain classes of corporations.

In the case of the payment of a cash dividend under the first condition, the realization would have to be based, to some extent, upon estimates, and the cash would have to be brought into the corporation by loan or otherwise. It is questionable whether, in conservative business practice, the payment of such a dividend is justified. In any event, the estimate should be conservative; that is, ample provision should be made for shrinkage in realization, and preferably the dividend should not be for the full amount of profit. If it should happen that the profit did not actually materialize, the result would be the payment of a dividend out of capital to the extent of such deficit; and presumably the directors who declared it would be subject to the penalties of the statute quoted, if the rights of creditors were impaired thereby.

It should be plain that there is a very practical limitation in the matter of the payment of cash dividends, and one which operates regardless of the book profit—namely, the possession of cash to an amount equal to such cash dividends.

Considering the second classification, a common instance of the expenditure of revenue receipts upon capital improvements is found in railroad accounts, and arises through the failure to obtain funds from capital liabilities in an amount sufficient to carry through improvement work. In such a case resort may be had to earnings, in order to avoid loss through suspension of the work, which may be reimbursed later from capital. During such a transfer from **revenue** to **capital,** net income is tied up in a loan to **capital,** and would be unavailable for dividend purposes.

The condition may be found of cash on hand, equal to a proposed dividend, but received from capital. In the case of its use, the Directors, under the statute, would undoubtedly be responsible in the event of the failure of the book profit, out of which the dividend was declared, to realize the amount of such dividend.

It is interesting to note at least two instances in the New York statutes which specifically prohibit the declaration of dividends. Under the Banking Law, interest unpaid, although due or accrued on debts

owing to the corporation or banker shall not be included in the calculation of its profits previous to a dividend, unless the interest is accrued upon loans secured by collaterals as provided in the law.

Among other restrictions upon the distribution of profits in a fire insurance corporation, the Insurance Law provides that in estimating surplus profits for the purpose of making a dividend upon capital stock, there shall be reserved from such profits a sum equal to the amount of all unearned premiums on unexpired risks and policies. This, it will be seen, is a prohibition of the distribution of profit that has been **realized,** but not **earned.**

Working Capital.

The inability to distribute profit often arises from the lack of proper provision for working capital or the use of working capital to increase the permanent plant. The natural result of this is that profits are held in the corporation to provide the funds in which to carry on the current operations.

An illustration of the extent to which the profit may be held in unrealized form, thus constituting in effect a working capital, is found in the current operations of an industrial corporation, the National Biscuit Company, which was organized on February 3, 1898, and purchased the property of several concerns engaged in the baking business According to the published report, all the obligations of the constituent companies were paid, leaving in the possession of the National Biscuit Company current assets to the extent of $3,388,511.00, which constituted the working capital of the corporation At the close of business, January 31, 1903, the current assets amounted to $10,093,366.67, and the current liabilities to $739,787.89, leaving a working capital of $9,353,578.78. The working capital, therefore, had increased by the sum of $5,965,067.78 during the five years of operations—a fact accounted for largely by an undistributed balance to Profit & Loss Account of $5,294,811.68.

In nearly all corporate enterprises it will be found that a considerable balance to the credit of income must exist before the distribution of cash dividends. In the case of a corporation that collects largely in advance for its services, as is the case with a railroad company, there will be a small percentage of unrealized profit so far as this alone is considered, in comparison with a concern that sells on long time. There are other matters which operate to prevent a close distribution of profit even in railway companies, which will be considered elsewhere.

Declaration of Dividends.

The elements being thus determined from which directors may, in their discretion, distribute profits in the form of dividends, the rules that govern the actual declaration and payment of dividends, as gathered from the decisions of the courts, will be given.

A shareholder in a corporation has no legal title to the property or profits of the corporation until a division is made or a dividend declared, and acquires no right or title to the accumulated gains from the revenues of the corporation, which entitles him to sue for his aliquot share of dividends. Until divided by the directors or trustees of the corporation, all of his property is held in joint ownership by the corporators, and no several right is possessed by the individual stockholder until after a dividend is declared. The declaration of a dividend, when a surplus has been made, rests in the fair and honest discretion of the directors, both as to amount and time of payment, uncontrollable by the courts.

After the declaration of a dividend each stockholder has a right to his proportionate amount, and this right cannot be abridged by any discrimination of the directors in any form whatever.

Dividends are payable to stockholders of record at the time such dividends are declared, and it has been held that, until a transfer is made on the books of the corporation, as required by the by-laws, the corporation will be protected in payment of dividends to the original stockholder, assuming that no notice of the transfer has been given. The real owner has recourse to the former holder, and not to the corporation.

It is usual in the larger corporations, especially those whose securities are listed on the Stock Exchange, to declare dividends payable to stockholders of record on a certain future date, thus giving the owners and holders of stock certificates assigned in blank, but not transferred, opportunity to make such transfer before the payment of the dividend. The transfer books are ordinarily closed by resolution of the board of directors for a few days, in order that the dividend list may be made up; and purchasers of stock certificates during this temporary closing of the transfer books hold their stock in assigned form until the re-opening of the books.

To obtain dividends upon shares, it is not necessary to produce the certificate which has been issued for the stock; but the dividends may be obtained upon the fact of a recorded title in the company's books; so long as no evidence has appeared from which the right can be impeached or questioned.

A dividend, unless otherwise provided, is payable only in lawful currency or tender.

Dividends Payable Account.

After the declaration of a dividend, the amount thereof is transferred to the credit of an account under a suitable caption, usually Dividends Payable. The balance represents a liability, being an amount due stockholders; and its collection is enforceable against the corporation the same as would be the case with other liabilities.

The transfer may be made from any account in which net profit, net income or surplus is recorded. Thus, the dividend may be charged to Profit & Loss Account, crediting Dividends Payable, the balance of the Profit & Loss Account being transferred to Surplus. A more usual method is to transfer all net profit or income to Surplus Account, charging the latter with dividends as declared. It is sometimes the case that a current year's operations do not provide sufficient net profit or income for the regular dividend, and the shortage is made up by drawing upon undistributed net profit or income secured in previous years. Under the method of transferring all net profit or income to surplus and charging dividends thereto, such a discrepancy between current income and the dividend is less in evidence than would be the case were it necessary to transfer the shortage from Surplus to Profit & Loss.

Another method is to transfer all net profit or income to an Undivided Profits Account, against which dividends are charged. Round amounts are transferred from Undivided Profits Account to Surplus, a sufficient balance being left in the former to equalize dividends in case of failure to earn a dividend in any particular year.

The simplest procedure of all, and one used in many small corporations, is to transfer the amount of dividends payable from Profit & Loss Account. The latter is allowed to remain in the accounts to measure the undistributed profits or surplus, no other account being set up. This is not incorrect in corporation practice, for the undistributed profit must remain in some account short of the Capital Stock Account. In single proprietorship or partnership practice, it would be incorrect to allow the Profit & Loss Account to stand open upon the books, it being necessary to transfer the undrawn balance to Capital.

Upon payment of a cash dividend, Dividends Payable Account is charged and Cash credited, thus closing the transaction.

A dividend account may be found with a debit balance, caused by the payment of profits out of current operations before the formal determination of profit and declaration of dividend. Whatever may be said as to the wisdom of such a course, the accounting procedure is to consider it an advance payment on account of Dividends Payable Account, the credit to the latter, upon the dividend declaration, applying as an offset.

Statements Disclosing Appropriation of Income.

For the purpose of showing the manner in which the appropriation of income is handled in practice, statements from two well-known industrial corporations are given herewith. The forms are not inserted for the purpose of criticism, but merely to familiarize the students with such statements as they actually appear in the reports.

The first statement is entitled Summary of Operations, and covers the fiscal year ending June 30th, 1910, of the corporation known as the American Locomotive Company. This statement is in a condensed, although comparative, form.

The other statement is the Income Account of the United States Steel Corporation for the fiscal year ended December 31, 1909, and is supplementary to the Condensed Profit & Loss Account of this corporation, shown in the preceding lecture.

The statements follow:

SUMMARY OF OPERATIONS OF THE
AMERICAN LOCOMOTIVE COMPANY AND THE MONTREAL LOCOMOTIVE WORKS, LIMITED

For the fiscal year ended June 30, 1910, as compared with the fiscal year ended June 30, 1909.

	1909–10	1908–09	Increases
Gross earnings........................	$32,203.392.10	$19,008,633.97	$13,194,758.13
Manufacturing, maintenance, and administrative expenses and depreciation.....	29,605,443.09	17,665,962.38	11,939,480.71
Net earnings..........................	$2,597,949.01	$1,342,671.59	$1,255,277.42
Interest, etc., on bonds of constituent companies, coupons notes, etc.........	513,190.69	355,532.36	157,658.33
Profit................................	$2,084,758.32	$987,139.23	$1,097,619.09
Dividends on preferred stock at 7 per cent.	1,750,000.00	1,750,000.00	
Surplus...............................	$334,758.32	$762,860.77*	$1,097,619.09
Net credit to profit and loss............	$334,758.32	$762,860.77 *	$1,097,619.09

* Deficit.

UNITED STATES STEEL CORPORATION

Income Account

For the fiscal year ended December 31, 1909

Total Earnings of all properties after deducting all expenses incident to operations including those for ordinary repairs and maintenance (approximately $35,000,000), employes' bonus funds, provisional allowance for corporation excise tax, and also interest on bonds and fixed charges of the Subsidiary Companies, per General Profit and Loss Account			$131,491,413.94
Less, Allowances for the following purposes, viz.:			
Sinking Funds on Bonds of Subsidiary Companies		$1,724,259.65	
Depreciation and Extinguishment Funds		5,884,367.12	
Extraordinary Replacement Funds		16,109,687.21	
			23,718,313.98
Net Earnings in the year 1909			$107,773,099.96
Deduct:			
Interest on U. S. Steel Corporation Bonds outstanding, viz.:			
Fifty Year 5 per cent. Gold Bonds		$13,987,035.35	
Ten-Sixty Year 5 per cent. Gold Bonds		9,630,258.05	
Sinking Funds on U. S. Steel Corporation Bonds, viz.:			
Annual Installment on 50 Year 5 per cent. Gold Bonds		3,040,000.00	
Annual Installment on 10-60 Year 5 per cent. Gold Bonds		1,010,000.00	
Interest on above Bonds in Sinking Fund		1,580,556.60	
			29,247,850.00
			$78,525,249.96
Add, Credit for premiums received on Subsidiary Companies' Bonds sold and net amount of sundry adjustments			548,445.08
Total			$79,073,695.04
Dividends for the year 1909 on U. S. Steel Corporation Stocks, viz.:			
Preferred:			
No. 32, $1\frac{3}{4}$ per cent., paid June 1, 1909	$6,304,919.25		
No. 33, $1\frac{3}{4}$ per cent., paid Aug. 30, 1909	6,304,919.25		
No. 34, $1\frac{3}{4}$ per cent., paid Nov. 30, 1909	6,304,919.25		
No. 35, $1\frac{3}{4}$ per cent., payable Feb. 28, 1910	6,304,919.25		
		$25,219,677.00	
Common:			
No. 22, $\frac{1}{2}$ per cent., paid June 30, 1909	$2,541,512.50		
No. 23, $\frac{3}{4}$ per cent., paid Sept. 30, 1909	3,812,268.75		
No. 24, 1 per cent., paid Dec. 30, 1909	5,083,025.00		
No. 25, 1 per cent., payable March 30, 1910	5,083,025.00		
Extra, $\frac{3}{4}$ per cent., payable March 30, 1910	3,812,268.75		
		20,332,100.00	
			45,551,777.00
Surplus Net Income for the year			$33,521,918.04

Surplus net income for the year, brought forward		$33,521,918.04
Appropriated from Surplus Net Income for the following purposes, viz.:		
On account of expenditures made on authorized appropriations for additional property, new plants and construction, and for discharge of capital obligations	$10,000,000.00	
Specifically set aside for account of construction expenditures at Gary, Indiana, Plant	5,000,000.00	
For Reserve Fund to cover advanced mining royalties	3,200,000.00	
		18,200,000.00
Balance of Surplus for the year		$15,321,918.04
Undivided Surplus on December 31, 1908		80,079,477.47
Total Undivided Surplus December 31, 1909, exclusive of capital surplus provided in organization and of Subsidiary Companies' Inter-Company Profits in Inventories		$95,401,395.51

Advanced Theory and Practice of Accounts

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CORPORATIONS—LECTURE VI

DIVIDENDS—Continued

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CORPORATIONS—LECTURE VI

DIVIDENDS—Continued

In General

The usual and simple condition of the payment of dividends in cash has been assumed and treated in the preceding Lecture, although there may be legal dividend settlements in other ways, a consideration of which will now be undertaken.

Scrip

Scrip is a temporary or provisional document, later to be converted into that for which it stands.

Thus, in the absence of cash with which to pay a dividend provision may be made for the issue and distribution of scrip, redeemable in cash at some future time or upon the happening of some event. The scrip may bear interest or not, and will be subject to the conditions imposed by its terms. In the accounts, it will appear as an account with a credit balance, measuring a liability. The entry will be a charge to Income, or to a Dividends Payable Account if such an account has been created; and a credit to an account under a caption to indicate its nature, as, for example, Dividend Scrip.

Instead of a scrip dividend payable in cash, there may be a scrip dividend payable in stock or bonds, the securities to be issued later in exchange for the scrip. The necessary debit having been made to Income, or Profit & Loss, the Scrip Account would be set up to record the liability. This would be closed, and the stock or bond account credited upon the exchange later.

The scrip may be issued on account of an interest instead of a dividend payment, and the same rules apply, except that it is a revenue charge, instead of a distribution of profit. The scrip itself would appear with a credit balance and rank as a liability.

The scrip may have no reference to a dividend, but may be merely a temporary certificate exchangeable later for a formal security. Thus, it may represent stock or bonds, exchangeable for the latter when the securities are engraved and printed, in which case it is known as **stock scrip** or **bond scrip.** In the accounts the scrip appears with a credit balance the same as the bonds or stock it represents would appear. Thus, there may be a certain amount of Preferred Stock outstanding, and, in addition, an amount of Preferred Stock scrip, exchangeable for the former. An account would be kept for each, but in the Balance Sheet, although stated separately, they would be added, and the total carried out to disclose the Preferred Stock issued and issuable.

Scrip is often created to avoid the issuance of fractional shares of stock or fractional bonds, when apportionments can not equitably be made in even shares or bonds.

Thus, an association of persons, known as a syndicate, which constructed a large railway improvement in and around Pittsburgh, received in part payment an issue of bonds, which were distributed *pro rata* among the subscribers to the syndicate. The bonds were of the par value of $1,000 each, and scrip was issued for fractional bonds. Thus, if $40,250 in bonds were due to a subscriber, he would have received 40 bonds and scrip for $250. The scrip was saleable in the market, and as it accumulated in the hands of the traders could have been exchanged for bonds—$1,000 of scrip for each $1,000 bond. In the accounts of the railway the outstanding scrip, although stated separately, ranked with the bonds as a liability.

The issuance of scrip is often avoided, in cases similar to the one given, by the sale of securities equal to the fractions, the cash being distributed, in lieu of the scrip, together with round amounts of the securities.

Scrip may be issued to bearer, as is often the case, or it may be issued in the name of a person with provision on the certificate for transfer by power of attorney.

Stock Rights

It is a general principle of corporation law that a stockholder has an inherent right to a proportionate share of an issue of new stock, in order that he may protect his interest in the corporation.

In the case of the issue of new stock by a corporation whose stock is selling above par, at a price not above such selling price, the right to subscribe therefor may be of value. It is the custom in such cases to

issue **stock rights** to the stockholders, in the form of certificates, which may be sold and transferred. These **rights** sell and pass from hand to hand prior to the issue of the stock, when they may be presented, with the required amount of money, for the issue of the stock.

The subscriptions may be payable in instalments, and a transferable form of certificate and receipt may be issued upon surrender of the **right,** upon which all payments are endorsed. Upon full payment such a temporary certificate and receipt are exchangeable for the stock.

Stock Dividends

A **stock dividend** arises from the issuance of stock on account of surplus, in lieu of a cash dividend. Thus, a corporation might have a condition as follows:

Assets................	$200,000	Capital Stock.........	$100,000
		Surplus..............	100,000
	$200,000		$200,000

Instead of making a distribution of profits in cash, it may be considered better policy to retain all the assets for the use of the company, and capitalize the surplus by issuing stock therefor. In this case, a dividend at the rate of 100 per cent. would be declared, payable in capital stock. Assuming that the issue is authorized and that all legal requirements are met, the entry would be a charge to Surplus Account, to close it, and a credit to Stock Dividend Payable Account. Upon the issue of the stock, the Stock Dividend Payable Account would be closed by a charge, and Capital Stock Account would be credited.

From the foregoing operation, which, although simple, embraces the principles involved in stock dividends, it will be seen that the only change is that there is $200,000 of capital stock outstanding, with a book value equal to its par, while before there was one-half the amount of stock outstanding, but having a book value of double its par.

Such a procedure is really not a dividend payment, in the sense that a dividend is a distribution of assets as profits, for all the assets of the corporation are retained. It is, rather, a dilution of the book value of the capital stock, and amounts, if for 100 per cent., to giving the shareholder an additional share for each share of stock owned, the two shares representing the same intrinsic value that was represented by the one share before the stock dividend.

There are several contingencies that may lead to the declaration of a stock dividend. Usually it comes from the desirability of retaining

the capital in the business, and formally converting it so as to settle all questions as to its distribution. The stock thus acquired may usually be marketed and thus converted to cash, although this would reduce the proportionate holding of the individual stockholder, and affect to that extent his voice in the control of the corporation. It may happen, however, that the aggregate market value of the new and old stock is greater than the value of the old, although the intrinsic values are the same. If so, and the profits are realized, a profit is achieved by the bookkeeping operation.

It has been desirable, in some classes of corporations, not to earn and distribute a profit beyond a certain rate. The stock dividend procedure has been used to produce the effect of a higher rate by providing a larger stock basis upon which to declare cash dividends.

It often becomes necessary to determine whether a stock dividend is **income** or **principal.** Thus, if the original stock were held for the interest of one person, and the income paid to another, the determination would vitally affect their respective rights. The decisions are conflicting, although the trend now seems to be in favor of treating such a dividend as principal, upon the theory that it amounts, in fact, to a retention, rather than to a distribution, of profits, despite the apparent intent on the part of the directors in calling it a dividend, to make it a profit distribution. There are recent decisions, however, that hold that stock dividends are income.

Dividend Checks

A **voucher check** is one that carries upon its face or attached a statement of the items for which settlement is made by its amount. The use of the check constitutes a receipt for the items specified. Its general use is restricted by the objection of banks to deviation from the standard forms and sizes of checks, without which the details, in many cases, can not be fully stated. There may be objection, in certain lines of business, to the publicity thus given to the details.

In the case of the payment of a dividend, however, these objections do not have weight, and it is desirable to have stated upon the face of the check the fact that it is a payment of dividend. The form may vary from a stamp stating merely " Dividend No. 10," to a special form of check, such as that used by railroad companies, specifying that it is in payment of " Dividend No. 10, being 6 per cent. upon 100 shares of Preferred stock standing in the name of, etc." The fuller the information, the better the form will be. In the case of the stockholders being numerous, there are likely to be cases in which it is alleged that a dividend,

payable perhaps months or years before, was not received. In such a case it is advantageous to have a paid check, endorsed by the payee, and specifying upon its face the exact dividend which it paid. The use of the check relieves the corporation from the necessity of mailing a letter with the check, and the stockholder from any acknowledgment other than the use of the check.

In some corporations, it is the practice to advertise the payment of the dividend upon a certain date, payable upon application at the office of the company or its banker. In the large corporations, where this custom is followed, it is usual to mail checks if a mailing order is filed. The custom of mailing all dividend checks is becoming general among the large corporations.

Preferred Dividends

A class of stock, by provision in the certificate of incorporation, may be entitled to a preference over some other stock or stocks, either as to the distribution of assets upon the dissolution of the corporation, or in the distribution of income, or in voting rights. A stock that is preferred as to distribution of profit will not be preferred in the distribution of assets or in voting powers, unless there is an express provision to that effect.

The preference as to the distribution of income or dividends may be cumulative at a certain rate; that is, in the absence of the distribution at the stated rate, the right of the holders of such preferred stock to a prior distribution of profit will accumulate in their favor. Thus, the 7 per cent. Preferred Stock of the United States Steel Corporation is cumulative, and if the corporation did not earn and distribute 7 per cent. per annum upon the stock, there would accumulate, annually, in favor of the holders thereof, an amount equal to 7 per cent. of the par of their stock. Such an accumulation is not a liability of the company in the sense that it is an amount that will have to be paid, but it does measure, in favor of one class of stockholders, a priority in the distribution of profits when earned. Such an accumulated preferred dividend should not be shown on the Balance Sheet, either as an actual or contingent liability, but it should be shown thereon as a memorandum, for the information of stockholders, in order that their respective rights may be set forth. It may be contended that it is a contingent liability, becoming actual upon the earning of a net profit. There is the substantial difference, however, that the ordinary contingent liability, when it becomes actual, is not dependent upon a surplus of assets over liabilities and capital, but ranks

with the other liabilities. The dividend liability is dependent upon such a surplus, and is, therefore, a matter of interest to the stockholders rather than to the ordinary creditors.

A dividend may be preferred to the extent of being payable out of the income of any year before the declaration and payment of a dividend upon some other class or classes of stock, without being cumulative. In such a case, a dividend upon the preferred stock is a prerequisite to the declaration of a dividend upon the stock not preferred. Thus, a corporation might have two issues of stock, one upon which a 6 per cent. preferred dividend must be paid out of any year's income, before the declaration and payment of a dividend upon the common stock.

Prior Deficits

The situation is often found in which a corporation has made losses and subsequently earns a net income. The question then arises whether it is necessary for the corporation to restore the assets of the Company to such an extent as would be necessary to wipe out the losses before the declaration and payment of a dividend.

The law and the decisions upon this subject are not clear. There is a line of cases which hold that a dividend is payable only out of an excess of asset value over combined capital stock and liabilities. If such decisions controlled, it would be necessary for a corporation to make up its losses or deficits before the payment of a dividend.

There have been other decisions which indicate that such prior losses are considered as capital losses of the year in which they occurred, and that their recoupment from operation is not necessary, although this doctrine is not so well settled that it can be stated absolutely.

So far as conservative accounting practice is concerned, there can be no question that the position of the Company should be restored to a place where the excess of asset value, fairly stated, over the amount of liabilities, after the payment of a dividend, should be at least equal to the amount of capital stock issued and outstanding. That is to say, there should be a surplus in the accounts at the time of the declaration and payment of a dividend at least equal to the amount of such dividend.

Premiums on Stock

The capital stock of a corporation may be sold legally at an amount in excess of its par value, and it seems to be clear that such excess constitutes a technical profit that may, in the discretion of the directors, be

distributed as dividends. Such a profit, however, should not be confused with the results of trading or operation, but should be stated separately. The ordinary and conservative practice is not to distribute such a surplus, but to hold it for the benefit and use of the corporation.

In the organization of banks and trust companies, it is not unusual to find that the capital stock is paid in at an amount in excess of its par value, and frequently at double the amount, so that the Company may start with a surplus equal in amount to its capital stock issued and outstanding.

Distribution of Capital by Dividends in Mining Companies

There is an exception to the general rule of corporation law forbidding the distribution of the capital in the form of dividends, in the case of companies organized to work out a mine, patent, or similar wasting asset.

Thus, if a corporation is organized to operate a particular mine, and for no other purpose, there would be no need for withholding from the stockholders the portion of the current returns that represents capital, and it could be distributed as a dividend, so called. This is subject, of course, to the previous provision for all liabilities.

It would be otherwise, in accounting practice at least, were it the intention to continue the corporation to operate other properties, for in that case it would be necessary to keep the capital intact. This result could be accomplished by reserving from the proceeds of each ton produced, an amount equal to the cost of the ton of unmined ore. This amount could be arrived at by dividing the cost of the mine by the tons it is estimated by the engineers to produce. It is true that this procedure may be accompanied by many difficulties, but, by conservative action, it is usually practicable to carry it out in such a way as to preserve the capital.

Donated Stock

The treatment of **donated stock,** and the transactions that arise in connection therewith, may involve an improper creation of a surplus account, and therefore will be considered in this Lecture.

Under the New York law, and under corporation laws in general, the stock of a corporation cannot be issued lawfully, in the first place, at a discount—that is, at less than its par value. It is probable that, as between the corporation and the stockholder, the stock could be sold legally at a discount; but as between such stockholder and the creditors of the corporation, in the event of failure to collect from the corporation the latter would have recourse against the stockholder for the difference between the purchase price of the stock and its par value.

Few purchasers would be willing to assume such liability, and there is thus constituted a serious stumbling block in the way of promoters or others who desire to organize corporations for the development of patents, mines, or other uncertain undertakings, and who plan to sell stock, at whatever price it may bring, to provide the funds with which to develop the undertaking.

The manner in which this question may arise in practice is set forth in Problem No. 1, Practical Accounting, in the New York C. P. A. Examination held in June, 1900, which is as follows:

> "It is proposed to organize for conducting a manufacturing business a small corporation based on certain rights and franchises owned by one of the proposed stockholders in the corporation. The amount of the capital is to be $100,000. The owner of the rights and franchises agrees to transfer them to the corporation in consideration of $50,000 of the capital stock, though he believes them to be worth much more than that amount. Certain capitalists are to be approached for cash subscriptions to the capital stock, but it is uncertain what opinion they will hold concerning the enterprise, and it is desired to have the stock in the treasury in such form that it can be sold below par if necessary. What method would you suggest for accomplishing the object in view? Formulate the Journal entries for opening the corporation books."

If the owner of the rights and franchises believes them to be worth much more than $50,000—say, to be specific, that he believes them to be worth $100,000, and the directors of the corporation concur in this judgment, the corporation could take them over on that basis, and issue its total authorized capital stock of $100,000 therefor.

The former owner, being, in the first place, willing to take $50,000 for his rights and franchises, in order to further the development of the undertaking he would be willing, no doubt, to donate one-half of his holdings, or $50,000 of stock, to the treasury of the corporation, to be sold to provide the necessary funds. He might well believe that his remaining $50,000 of stock would have greater value with such development than the entire $100,000 of stock would have without such development.

Inasmuch as stock originally issued for its par value may, if it subsequently comes into the treasury of the corporation, be sold for any price that it may bring, the procedure indicated would meet the requirements of the problem.

Assuming that this method is adopted, and that the donated stock is sold at fifty cents on the dollar, the following entries illustrate the principles of debit and credit necessary to record the transactions, viz.:

SUNDRY RIGHTS & FRANCHISES......	$100,000	
To BLANK, Vendor....................		$100,000
For property acquired.		
BLANK, Vendor............................	$100,000	
To CAPITAL STOCK................		$100,000
For payment of balance due in stock.		
TREASURY STOCK......................	$50,000	
To STOCK DONATION...............		$50,000
For donation.		
CASH..................................	$25,000	
DISCOUNT ON SALES OF TREASURY STOCK............................	$25,000	
To TREASURY STOCK..............		$50,000
For sale of stock.		
STOCK DONATION......................	$25,000	
To DISCOUNT ON SALES OF TREASURY STOCK......................		$25,000
For transfer.		
STOCK DONATION......................	$25,000	
To SUNDRY RIGHTS & FRANCHISES.		$25,000
For transfer.		

A Balance Sheet of the corporation, prepared after the foregoing entries were carried into effect, would appear as follows:

THE BLANK CORPORATION

Balance Sheet as at..................

ASSETS		LIABILITIES	
Sundry Rights and Franchises.	$75,000	Capital Stock.......	$100,000
Cash........................	25,000		
	$100,000		$100,000

The Balance Sheet evidently discloses the true state of affairs, for the corporation has, in fact, acquired two items of assets in exchange for its stock issue, viz.; Cash, to the extent of $25,000, and Sundry Rights

& Franchises, which is fairly chargeable with the difference, $75,000. It should be noted that the facts are recorded at each stage of the procedure.

While, for the sake of clearness in explaining the most important points in the foregoing problem, round amounts have been used, in practice it would necessarily happen that there would be at least three incorporators to whom stock would be issued, and this would have to be shown in the opening entries. It is customary in such cases to issue at least five shares of stock at par for cash, although it is not necessary that the shares be paid for in cash.

A method that is used to a considerable extent is carried out by making no entry whatever when the stock is returned to the treasury. When it is sold, an entry is passed debiting cash and crediting the property account, or possibly an account under the caption of **Proceeds of Donated Stock,** this latter to be credited to the property account at a later date. The objection to this procedure is that no record is made in the financial books when the stock is returned to the Company. This objection is overcome to some extent, however, by the fact that the donation is usually made a matter of record in the Minute Book.

An erroneous procedure is sometimes carried out by which a Surplus, or Working Capital, account is set up when the stock is donated to the Treasury and credited, Treasury Stock being debited.

Against this so-called Surplus, or Working Capital, account, the discount on stock sold is charged. If this method had been adopted in the problem under consideration, the Balance Sheet would have been as follows:

Incorrect Solution

THE BLANK CORPORATION.

Balance Sheet as at...............

ASSETS		LIABILITIES	
Sundry Rights & Franchises..	$100,000	Capital Stock	$100,000
Cash......................	25,000	Surplus (or Working Capital).........	25,000
	$125,000		$125,000

This procedure is supported on the ground that, if the Sundry Rights & Franchises are really worth $100,000, there is an increase in capital to the extent of the amount of stock donated, and that against this should

be charged any discount, resulting in a net amount of Surplus or Working Capital.

The objection to this procedure is that there is no profit out of which to create Surplus. The whole operation is undertaken to place the stock in the treasury in such shape that it may be sold at a discount, and the creation of a nominal profit or capital out of the transaction is, in nearly all cases, likely to create wrong impressions as to the financial condition of the corporation.

The consideration of Donated Stock has been necessary owing to the frequency with which it arises in practice. It is a transaction open to some legal doubt, and the accountant should proceed with the approval of the counsel of the corporation.

Illustrative Balance Sheet and Profit and Loss Account

The Balance Sheet of the Anaconda Copper Mining Company, as at December 31, 1909, and the Profit and Loss Account of the same company for the year ending December 31, 1909, are appended, for the purpose of placing before the student examples for study.

ANACONDA COPPER MINING COMPANY.

BALANCE SHEET DECEMBER 31, 1909.

ASSETS

FIXED:		
Mines and Mining Claims, Coal Mines, Water Rights and Lands for Reduction Works, Tailings, Ditches, Sawmills, etc., including Townsite property	$20,699,957.35	
Buildings and Machinery at Mines, Refinery, Sawmills, Foundries, Waterworks, etc	3,027,888.44	
Investments in Sundry Companies	534,088.32	$24,261,934.11
DEFERRED:		
Insurance Unexpired	$ 43,138.41	
Materials and Supplies for use in future operations	2,138,530.46	2,181,668.87
CURRENT:		
Merchandise held for sale	$ 554,622.73	
Copper, Silver and Gold on hand—Copper at cost; Silver and Gold at market, less allowance for selling expenses	5,986,963.84	
Loans and Accounts Receivable and Cash	3,934,402.36	10,475,988.93
		$36,919,591.91

LIABILITIES

CAPITAL:		
Capital Stock, Authorized and Issued, 1,200,000 Shares of $25.00 each		$30,000,000.00
CURRENT:		
Accounts and Wages Payable, including Taxes accrued	$1,633,030.74	
Dividend Warrants not presented	7,345.08	
Dividend No. 37, payable January 19, 1910	600,000.00	2,240,375.82
SURPLUS:		
Balance December 31, 1908	$4,944,442.85	
Add Profit for the year ending December 31, 1909, per Profit and Loss Account annexed	2,134,773.24	
	$7,079,216.09	
Deduct Dividends Nos. 34, 35, 36 and 37	2,400,000.00	4,679,216.09
		$36,919,591.91

Illustrative Balance Sheet and Profit and Loss Account—Continued.

ANACONDA COPPER MINING COMPANY

Profit and Loss Account for the Year Ending December 31, 1909.

Copper, Silver and Gold on hand at beginning—Copper at cost; Silver and Gold at net selling price	$6,169,244.90	Sales of Copper, Silver and Gold—i. e., Deliveries to Customers	$11,591,844.76
Mining Expenses, including Development and Depreciation on Plant	5,511,820.15	Royalties and Precipitates Sales	46,582.40
Ore and Scrap Copper Purchases, including Transportation and Purchasing Expenses thereon	105,489.74	Dividends on Investments	32,147.25
Transportation of Ore from Mines to Reduction Works	160,932.49	Rental of Water Rights	50,000.00
Reduction Expenses at Anaconda, including Depreciation	2,819,021.50	Miscellaneous Receipts	11,732.80
Transportation of Metals from West to East, Refining and Selling Expenses	1,163,306.70	Net Profit of Subsidiary Departments, after deducting Depletion of Coal and Timber Lands and Depreciation of Plants and Equipment	280,813.41
Administration Expenses	60,326.31	Copper, Silver and Gold on hand at end—Copper at cost; Silver and Gold at net selling price	5,986,963.84
Balance, being Profit, before dealing with Interest, carried down	2,009,942.67		
	$18,000,084.46		$18,000,084.46
Balance, being Profit, carried to foregoing Balance Sheet	$2,134,773.24	Balance brought down	$2,009,942.67
		Interest	124,830.57
	$2,134,773.24		$2,134,773.24

ADVANCED THEORY AND PRACTICE OF ACCOUNTS.

ORGANIZATION AND FINANCE.

BY HOMER ST. CLAIR PACE, C. P. A.

CORPORATIONS—LECTURE VII.

FUNDS AND RESERVES.

Advanced Theory and Practice of Accounts.

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CORPORATIONS—LECTURE VII.

FUNDS AND RESERVES.

Definitions and Distinctions.

The use of the term **fund** is common and proper whenever it is necessary to distinguish certain assets, associated for a purpose, from all other assets. Hence, a **fund** may be defined as a stock or accumulation of assets, either money or convertible wealth, brought together for a particular purpose.

The property and property rights belonging to an individual, or to an organization formed for the production or conservation of values, constitute a fund, the assets of which are segregated from all other assets and distinguished as belonging to the particular fund. Without thus providing for the identification of the assets the rights of creditors and proprietors could not be defined and safeguarded.

The assets of a corporation constitute the corporate fund and are used in carrying out the objects of the corporation. A portion of the assets may be contributed as capital by the stockholders, while in many cases a considerable portion of the entire fund is loaned or advanced by creditors. The **fund** is the entire stock of assets, whether invested as capital or advanced as loans, and it may be subdivided in various ways. For example, certain assets may be segregated and held for the purpose of liquidating a financial obligation, or for the purpose of making a certain improvement to the permanent plant. In this way assets are associated within the corporation for particular purposes and funds created.

In order to make clear the relation of a special corporate fund to the general fund, the following form of balance sheet, arranged especially to present the condition, is submitted:

ASSETS.		CAPITAL AND LIABILITIES.	
Assets (general fund)	$175,000	Capital Stock	$100,000
Assets (fund for payment of liabilities)	25,000	Surplus	50,000
		Liabilities	50,000
	$200,000		$200,000

The entire corporate fund is $200,000, although the intention is evident to hold $25,000 of assets in a special fund, available for the payment of liabilities. The sources of the funds are shown on the right side.

The use of the term **fund,** as has been indicated, is not limited to corporation practice. It may as well be applied to any stock or accumulation of assets, irrespective of the form of business organization holding title thereto.

Thus, the contribution of money and articles of value without formal organization for the use of an indigent family, constitutes a fund that may be designated as a **relief fund.**

A fund may be temporary in its nature, as in the case of a **building fund,** which ceases upon the completion of the building for which it is created; or it may be permanent in its nature, as in the case of a **maintenance fund,** created for the upkeep of a building after its completion. The latter may be divided into **principal,** or the part that constitutes the body of the fund, and **income,** the part that is derived from the use of the principal, and that may be expended without impairing the fund proper.

The fund may be a **trust fund,** that is, a fund held by one, known as a **trustee,** for the benefit of another, known as a **cestui que trust,** or beneficiary.

The fund may be gradually built up by setting aside principal sums and by the accumulation of interest thereon, in which case it may be known as a **sinking fund.** Hence, a sinking fund is defined to be a gradual accumulation of assets, by a governmental body or private enterprise, for a particular purpose, most frequently the payment of a loan upon its maturity.

The creation of funds is essential to the production and conservation of values, and their treatment, therefore, will be necessary throughout all accounting.

In this lecture, it is proposed to consider in particular funds common to the corporate form of business organization.

Fund Accounts.

An **account** is a collection, under a distinctive caption, of the debits and credits pertaining to a particular person or subject. Thus, it may be a ledger record of the debits and credits relating to a person, to an asset, or to some phase of a business, or it may be a document apart from books of account, formally setting forth, for a period of time, a series of financial demands or claims, with their offsets, of one person against another. All financial transactions of an enterprise are recorded in accounts.

The establishment of a fund is a transaction, or a series of transactions, having to do with asset value. Funds always consist of assets and can, in no instance, be dissociated therefrom. Inasmuch as assets appear, throughout all accounting upon the double entry basis, as debit balances, it follows that funds, likewise, must appear with debit balances.

Capital consists of assets, but in double entry accounting the credit balance that is designated Capital, merely measures the asset value contra. In corporate practice, the accounting capital would be the amount of capital stock issued and outstanding, plus any undistributed profit or surplus, or less any deficit. In the case of a surplus, the intent to withhold a portion thereof from distribution and to accumulate assets in some particular form to the extent of the amount of such withheld profit, might be evidenced by a transfer from the surplus account to a special account. The amount thus set aside in a special account would not be a fund, but it might show the intention to create a fund. The fund when created would appear in an account with a debit balance, measuring the actual assets associated for the purpose of the fund.

Reserves.

A **reserve** is something held back for the present. The term is applied, in Accounting, most frequently to the withholding of some part of the credit balances that represent profit. Thus, when there is an intention expressed by the directors to withhold from distribution any part of the undistributed net profit, such action may be shown by an account under a caption that indicates the facts in the particular case.

The subject of income has been treated at length in preceding lectures, and it will be taken for granted that the student has in mind the classes of expenses and losses, direct and indirect, that are properly chargeable against income before arriving at the net income or surplus out of which lawful dividends may be declared and paid.

The element of surplus, when not distributed in dividends, may be left in a Surplus or similar account without definite action by the board of directors, or it may be formally appropriated. In case a reserve of profit is made, not for a definite purpose, but merely to indicate the intention to withhold surplus from distribution for the general good of the corporation, the term **Reserve** may be used as a caption for the account to which the amount is transferred. It differs from surplus only in the expression of intention as to distribution.

The appropriation may be for a particular purpose. Thus, it may be made for the betterment of assets, as a conservative and precautionary measure, even though full allowance has already been made for depreciation. The account to record the amount thus set aside may be called **Reserve for Betterments.**

It must, in the first place, be thoroughly understood and appreciated that the credit balance to surplus, or other profit account, is not, in itself, a profit. The real profits exist in the assets on the other side of the accounts, the amount of which is **measured** by such credit balance. Therefore, in transferring an amount from Surplus to Reserve for Betterments, no **fund,** in the sense that a fund is a collection of assets collected or set aside for a specific purpose, is created. All of the assets are, in a general way, a fund for the purposes of the corporation, but from the general fund no specific fund is created for betterments by the transfer from Surplus. A **fund** for betterments could be created only by setting aside and ear-marking specific assets. However, the appropriation and transfer from Surplus to Reserve for Betterments is a formal withholding of profit from distribution, and may be taken as an evidence of intent to expend upon betterments an amount equal to such appropriation. In fact, such action is often taken after the net income or surplus has been expended in betterments and additions, in order to confirm such expenditures.

It would be improper, for the reasons given, to designate such a transfer from Surplus as a **fund,** and the reasoning applies to all similar appropriations and transfers. The fund, if created, exists on the asset side of the accounts.

Reserves for Losses.

The term **reserve** is often used in a different sense. It will be recalled that such indirect expenses as depreciation on fixed assets, and estimated losses on the realization of current assets, are proper charges before the determination of net income. In order to retain cost values in the accounts, and for other reasons, the fixed asset is not written down by the amount of the allowance for depreciation, but a **Reserve for Depreciation** is set up.

So also, in the case of provision for estimated losses in the collection

of accounts receivable, the custom is to charge the Profit & Loss, or Income, Account and credit an account called Reserve for Bad Debts. The reason for the creation of such an account is that the accounts in which the losses will occur are at the time unknown, and it is necessary to set aside, or reserve, a portion of the credits equal in amount to such expected loss, in order that the element may be held available to write down the asset account when the exact amount and location thereof are known.

The cases cited are not true reserves, but are merely offsets to losses that exist or that are expected to become actual, but which it is not yet practicable to write off. So an estimated part of income (not net income), is held available to meet such losses when it becomes feasible to write them off. If the estimate is too large, then to the extent of the overestimate a real reserve, or profit, exists that may later be transferred to Surplus. If the more unfortunate situation of an underestimate exists, it will have to be made good from later periods, or from Surplus.

To avoid confusion, such accounts should, in their caption, state the exact purposes for which they are created. In the Balance Sheet they should be deducted from the respective assets for which they are created, and should not be carried to the liability side. In particular, such accounts should not in any way be confused with true reserve or surplus.

Secret Reserves.

In some instances, corporations, particularly financial institutions, understate asset values, thus creating a so-called **secret reserve.** One of the purposes of this is to render uniform the earnings or profits, by drawing upon such secret reserves in times of business depression, leaving the Reserve or Surplus, formally set aside, intact.

This practice is wrong in theory, as there is no more justification for understating asset values than for overstating them. It is, perhaps, needless to point out that the accountant is more frequently under the necessity of protesting against the latter than the former practice.

It is the custom of some institutions to omit the value of their banking house and fixtures from the Balance Sheet, stating, however, the name of the asset and carrying to the money column the word **nil.** This is doubtless better than omitting it altogether, as it serves notice that asset values exist that have not been taken into account.

Sinking Funds.

A sinking fund may be created by the gradual conversion of assets into the form adopted for the particular fund without reference to the profits of the corporation. If this were done and the sinking fund created

for the purpose of meeting an obligation at its maturity, it could be used for that purpose and the procedure would merely be the extinction of a liability by assets gradually accumulated and held for that particular purpose.

A sinking fund may be created from assets appropriated for that purpose from profits. Inasmuch as a liability, theoretically, is payable out of assets other than those secured as profits, there is no accounting reason why net income or profits should be withheld from distribution for the purpose of providing a fund to meet the liability at its maturity. It is obvious, however, that if, in addition to the general assets of the undertaking, a part of which are secured through the incurrence of the liability, further assets are accumulated through the retention of profits, there is added financial strength and greater protection to the creditors.

In case an obligation is secured specifically by mortgage upon a wasting property, as might be the case in a mining company where the capital assets are reduced by the extraction and sale of the mineral, the sinking fund plan may be used to accumulate from the income an amount sufficient to render certain the payment of the liability at maturity. This, strictly, is not the accumulation of a fund from withheld profits, but the accumulation of a fund from returns to keep intact the assets and to prevent the distribution of capital in the guise of dividends. Thus, if the payment of a debt were secured by a mortgage upon coal lands, a provision might be necessary that required a certain amount, equal at least to the cost value of the coal, to be retained from the income received from sales of coal, and placed in a fund for the benefit of creditors.

The creation of a fund, for which assets are ear-marked and set aside, whether out of profits or not, does not necessarily, without the creation of a specific lien thereon, insure the payment of an obligation. So long as the assets are under the control of the undertaking, and subject to its vicissitudes, losses in other assets will eliminate the reserve for sinking fund, and possibly necessitate the use of the sinking fund assets for the general purposes of the concern.

Hence, when the sinking fund is created for the protection of a creditor, and not merely as a convenience for the one creating it, it is ordinarily required that the sinking fund be in the hands of a trustee, most often a trust company. In this way it is pledged for a particular purpose, and is removed from the fund that is available for the payment of unsecured creditors.

It is important to bear in mind that all appropriations or reserves from profit depend, for their integrity, unless the assets represented

thereby are taken out of the control of the corporation, upon the accounts as a whole, and losses that bring the assets, fairly valued, to a point where they do not exceed the combined amount of the liabilities and capital stock, eliminate every such appropriation from Surplus. Therefore, from the viewpoint of the interested creditor, the only satisfactory sinking fund is the one beyond the control of the debtor, pledged for the benefit of his claim.

Sinking Fund Entries.

In case a sinking fund is created by the mere conversion of assets from one form to another form, without reference to profits, the entries would provide for charging the sinking fund account, or accounts, with the assets belonging to the fund and crediting the accounts from which such assets were transferred. If the sinking fund assets were augmented by interest accretions received on such assets, the income would be merged in the ordinary income account, for the reason that the accumulation of the fund bears no relation to profits.

In case the fund is created out of profit assets, it would be necessary in the first instance to transfer the amount to be set aside from net income or surplus to an account created to show the appropriation of profit. Inasmuch as it is profit held back for a time, for sinking fund purposes, the account may properly be called **Reserve for Sinking Fund.** This account will then measure the amount to be withheld from profit for the purpose of the sinking fund, and in a statement to disclose the financial condition, it would be stated in an indent column as a distinct item, but merged with unappropriated surplus in the total column to show the entire amount of surplus in the corporation.

The creation of the fund proper will then proceed by the conversion of assets to the form required in the sinking fund, in the same manner as before stated. If the sinking fund is in the hands of a trustee, the ordinary procedure is to pay the trustee an amount of cash equal to the appropriation from net income or surplus. If the sinking fund is brought to the proper amount, it will equal the Reserve for Sinking Fund shown with a credit balance. If it is less than the appropriation, there will still remain an amount of assets to be converted to the sinking fund basis.

Interest accretions, whether collected by the corporation or the trustee, would increase the amount of the fund, and could be credited either to the Reserve for Sinking Fund or to a special sinking fund income account, later to be transferred, after deducting any possible costs or charges, to the Reserve for Sinking Fund Account.

Sinking Fund Illustrations.

A bond, as will be explained more fully in subsequent lectures, is a written agreement to pay to bearer, or to some person, or order, a certain sum of money at some future determinable time, the payment of which is, in most cases, secured by a mortgage or trust deed upon real property, and, in some cases, upon personal property as well. The interest is payable according to the terms of the bond, usually quarterly or semi-annually. In case of failure to pay the interest or the principal of the bond at maturity, a trustee, designated in the mortgage securing the bonds, is empowered and obligated to foreclose the mortgage or trust deed and dispose of the property for the benefit of the claims of the holders of the bonds.

The mortgage or trust deed, in many cases, provides that the company issuing the bonds shall, as additional security, withhold each year from its net profits a certain amount, which shall be turned over to the trustee, to be held, with or without interest accretions, for the payment of the bonds. In some cases, a certain proportion of the bonds are drawn each year by lot and are retired out of the funds thus in the hands of the trustee, or, the funds may be held, with interest accretions, until the maturity of the bonds, when the entire issue is redeemed.

A case may be assumed in which, by the provisions of a trust deed, a company must pay, for a period of twenty years, the sum of $25,000 from profits each year, to a trustee, which is to be invested in securities of the class authorized by law for savings bank investments. The interest received on such securities to is be added to the fund, and together with the principal of the fund, is to be used in the payment of the bonds at maturity.

In some cases the securities purchased under the provisions of the agreement were bonds bought at a premium, that is, an amount in excess of face value. Inasmuch as the bonds would be payable at maturity at par, the value of the bonds would have to be written down proportionately each year against the nominal interest return that was received therefrom.

The entries necessary to cover the foregoing transactions for a term which involved the setting aside of $25,000 for the fund, the purchase of securities, receipt of interest, etc., would be as follows:

SURPLUS..

To RESERVE FOR SINKING FUND.............

This entry is necessary to indicate in the books of the company the formal reservation from distribution, for a certain period, of the sum which is agreed to be turned into the fund out of profits.

SINKING FUND TRUSTEE, Cash Account............

To CASH..

This entry is necessary to record the actual payment of money to the trustee as required under the agreement. The amount is thus placed in the hands of a third party, which safeguards it against losses that the company might incur in other directions.

SINKING FUND SECURITIES WITH TRUSTEE......

For bonds purchased at par.

PREMIUM ON SINKING FUND BONDS..............

For premium on bonds purchased.

To SINKING FUND TRUSTEE, Cash Account......

If, in the books of the company, it were desirable, as it no doubt would be, to keep an exact record of the transactions of the trustee, it would be necessary on receipt of information from the trustee, to pass entries setting up the securities purchased for the purpose of the fund, either in a general account or in separate accounts. Inasmuch as the premium would be written off, either at once or gradually, against the income, it is taken into a distinct account.

SINKING FUND TRUSTEE, Cash Account............

To SINKING FUND REVENUE.................

The above entry would be passed, upon information received from the trustee, to record the receipts on account of interest on securities held for the fund. The cash would augment the cash received from the corporation on account of the yearly payment, and would be available for the purchase of further securities.

SINKING FUND REVENUE........................

To PREMIUM ON SINKING FUND BONDS......

The foregoing entry would be necessary to charge off against the revenue account the proportionate amount of the premium. A still more conservative measure would be to write off immediately from the revenue any such premium, although in theory such charges should be distributed over the life of the bond.

A change in the procedure might be the purchase of the bonds of the corporation for which the sinking fund is created, instead of other securities. This is a matter that would be governed by the agreement in the particular case and does not affect in any way the principles involved.

Finally, in the case assumed, before the retirement of the bonds for which the sinking fund is created, the securities in the hands of the trustee

would be reduced to cash, and if sufficient to retire the bonds, an entry would be passed as follows:

BLANK MORTGAGE BONDS........................

To SINKING FUND TRUSTEE, Cash Account.....

If the funds were not sufficient, the balance would have to be made up by the corporation.

The net effect of the whole transaction is to give an added security for the payment of the bonds through a certain amount of profit being withheld from distribution among stockholders, which is rendered particularly effective by its withdrawal from the general fund of the corporate assets and its deposit in the custody of a trustee.

During the sinking fund operations, the two credit balances arising would be stated as Reserve for Sinking Fund and Sinking Fund Revenue. These amounts would represent surplus if they were properly created out of net profit, but would differ from ordinary surplus if there is an agreement that provides that, to the extent of the balances of these accounts, profit shall not be distributed. There is therefore, justification for displaying these facts in the accounts stated, although the two should be added to the total of unappropriated net profit or surplus to obtain the grand total that discloses the undistributed profit.

The credit balances of profit held from distribution during the sinking fund agreement are released by the payment of the bonds, and, being an element of surplus or undistributed profit, the accounts should be closed by a charge to each and a credit to surplus. A better procedure, perhaps, would be to transfer it back to Profit & Loss, or Income, from whence it came, and then to transfer the amount to Surplus.

During the operation of the sinking fund, the sinking fund accounts proper with debit balances, consisting of securities, cash, etc., should equal in amount the accounts with credit balances, and their display in opposition would be effective in balance sheet construction. They would then show on the right side the sources of the fund and on the left side the state of the fund as to the character of its assets.

Margin, Rest, Etc.

The element of surplus may be recorded in the accounts under many names. Thus, the words **margin** and **rest** are used in this connection. Enough has been said to enable the student to determine the element and to treat it according to accounting principles.

Funds may be stated under various captions. Thus, assets are often accumulated in a **Redemption Fund** for the retirement of a liability,

which does not differ essentially from a sinking fund. Likewise, the term **Investment Fund** is sometimes found in use, to denote an aggregation of assets held for investment purposes.

Entries upon Dissolution.

Upon the dissolution of a corporation, the legal formalities having been complied with, it is first necessary to liquidate the liabilities. The remaining assets are distributed *pro rata* among the stockholders of record.

Capital Stock Account remains a fixed amount throughout the life of a corporation, and it is not permissible to carry thereto any profits or losses. Inasmuch as in the realization and liquidation of a corporation there is almost certain to be a surplus or a deficit, it is considered best, for the purpose of the retirement of the Capital Stock, to merge such surplus or deficit, and the amount of the stock to be canceled and retired, in a distinct account. This account may be given a suitable caption, as for example, Stockholders' Distribution Account.

The liabilities are liquidated, the accounts being debited to balance. The assets are realized and the respective accounts credited with the sums produced. Capital Stock Account is closed by a charge to balance. and a Stockholders' Distribution Account is raised and credited with the amount. The debit and credit balances existing in the realized asset accounts, and any surplus or deficit, are carried to the Stockholders' Distribution Account. Then, upon surrender of stock certificates for cancellation, each stockholder receives his *pro rata* share of the assets, whether cash, securities, or other assets, and the Stockholders' Distribution Account is charged and the asset accounts credited. As the distribution progresses, the balance of the distribution account measures the assets undistributed.

Thus, the balance sheet of a corporation about to be dissolved might be as follows:

BLANK CORPORATION, BALANCE SHEET AS AT........

Assets		*Capital and Liabilities*	
Cash....................	$55,000	Capital Stock...........	$100,000
Stock of X, par..........	50,000	Accounts Payable.......	30,000
Deficit..................	25,000		
	$130,000		$130,000

It is assumed that the stock is held in equal amounts by A, B, C and D; that the liabilities are paid and the remaining assets distributed. The following entries would be necessary to close the books:

ACCOUNTS PAYABLE..................	$30,000	
To CASH..........................		$30,000
CAPITAL STOCK......................	100,000	
To STOCKHOLDERS' DISTRIBUTION ACCOUNT....................		100,000
STOCKHOLDERS' DISTRIBUTION ACCOUNT..............................	25,000	
To DEFICIT.....................		25,000
STOCKHOLDERS' DISTRIBUTION ACCOUNT..............................	75,000	
To CASH..........................		25,000
" STOCK OF X..................		50,000

For assets turned over to stockholders for stock surrendered and canceled, being 75 per cent upon its par value, as follows:

Stockholder	Par of Stock Canceled	Paid		
		Cash	Stock	Total
A......	$25,000	$6,250	$12,500	$18,750
B......	25,000	6,250	12,500	18,750
C......	25,000	6,250	12,500	18,750
D......	25,000	6,250	12,500	18,750
	$100,000	$25,000	$50,000	$75,000

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CORPORATIONS—LECTURE VIII

LONG-TIME NOTES AND BONDS

PACE & PACE

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LONG-TIME NOTES AND BONDS

In General

The capital of a corporation, at the outset, is derived from the payment into the corporation of assets equal or greater in value to the par of the stock issued. This fund constitutes the **accounting capital,** that is, the excess of asset value possessed over the amount of liabilities owed. If profits are made and not withdrawn the accounting capital is increased by the amount thereof.

In another sense, however, the capital is the aggregate wealth or property held and used by the enterprise, irrespective of the method by which it is added to the general fund. Thus, in case money or property is advanced to the corporation as a loan, instead of being contributed as a capital investment, its amount increases the fund of assets in hand and thereby the available asset capital. The accounting capital would not be increased by such a procedure, inasmuch as a liability is set up equal in amount to the asset value borrowed.

The funds thus secured by loans may be divided, in a general way, between those obtained by long-time, or capital, loans, and those obtained by short-time, or current, loans. In the case of the former, it is quite usual to renew the loans upon maturity. When this is practicable and reasonably certain, and it is within the plans of the management of the corporation, the amount of such long-time, or capital, liabilities, may be considered a permanent fund. Although it constitutes a liability, falling due to be paid at a certain time for a definite amount, and is not an element of proprietorship, the amount of such renewable capital liabilities may be added to the amount of issued capital stock to determine the amount of capital available for the permanent uses of the enterprise.

The assets secured by short-time loans are not acquired for permanent use, but for current needs. Such loans rank as current liabilities and are payable out of current assets.

Thus, it will be seen that corporate funds come, in the first place, through the **proprietors,** by the payment of stock or the accumulation of profits; and, in the second place, through advances by persons who thereby become **creditors.** The latter, for the repayment of their loans, have general and special rights in the assets of the corporation that are prior to those possessed by the proprietors.

A current liability is most often an indebtedness for merchandise, material, labor, or money advanced, and stands as an open account or in the form of an unsecured promissory note. This form of liability requires no special consideration at this time.

It is the purpose of this Lecture to consider the formal evidences of indebtedness issued on account of long-time advances or loans, usually classed as capital liabilities, and the procedures necessary to their proper treatment in accounts.

Registered Notes

There is no prescribed form of note or security necessary to be used in the borrowing of capital. The loan may be negotiated without the issuance of a note, or it may be upon the ordinary form of promissory note, or it may be upon a more formal, and secured, instrument.

The procurement of loan capital in large amounts involves **borrowings** from a number of persons, or, to state it in more usual terms, it necessitates the **sale of securities** to such persons. Therefore, even though the object is effected through unsecured notes, it is usual to adopt a form of note that will be attractive to investors.

For this purpose a **registered** note may be used. A clause is inserted in the face of the note providing for its registration, on the books of the company, in the name of the payee, and for the issuance of a new note to any designated transferee, upon the surrender of the old note with the power of attorney on the back thereof properly filled out. The notes are usually of some fixed denomination, say $500 or $1,000 each. For the purpose of identification, the notes may be issued in series, as Series A, Series B, etc., or they may be identified by a title including the year in which they mature, as 5% Registered Gold Notes of 1910, 5% Registered Gold Notes of 1911, etc.

The interest upon registered notes is paid, at the prescribed dates, to the holders of record, by check, or otherwise, as is convenient.

In case of the loss or destruction of a registered note, the registered holder may obtain a new note upon proving his loss and filing a **bond**

of indemnity, usually for double the amount of the note, safeguarding the company against possible claims or loss. The registration in this way provides a satisfactory protection against loss.

The notes should be printed with stubs, and bound in the same manner as a stock certificate book. The stub of each issued note is filled out with the name of the payee, date, and such other information as may be useful. A **note ledger** should be provided, and an account opened with each note-holder, showing address and the date and number of each note registered in his name. In case of transfers, the surrendered notes can be pasted back against their respective stubs, and the entry made direct therefrom to the note ledger. In case there are many transfers, the work may be facilitated by the use of a transfer journal. For interest-paying purposes, a list of the note-holders is prepared from the note ledger, and the total proved against the general ledger. The use of cards for the note ledger is often desirable on account of the convenience of the cards in addressing envelopes and preparing interest-paying lists.

So far as the general books are concerned Cash, or other asset received, is charged and the note issue credited thus:

CASH................................	$100,000	
TO 5% REGISTERED GOLD NOTES OF 1911............................		$100,000
For sale at par of notes Nos. 1 to 100 inclusive, registered as follows:		

* * * * *

The general note account shows the total liability on account of the notes issued in this class, while the note ledger discloses the names and holdings of the individuals.

The following is a form of a five-year registered note, the direct obligation of the company, without special security, as used in railway financing:

No....... $5,000.

THE BLANK RAILWAY COMPANY

FIVE PER CENT. FIVE-YEAR NOTE

REGISTERED

NEW YORK, N. Y., U. S. A., August 1, 1904.

On the first day of August, 1909, for value received, THE BLANK RAILWAY COMPANY (a corporation organized and existing under the laws of the State of Illinois) hereby promises to pay to

....

the sum of FIVE THOUSAND DOLLARS ($5,000) in gold coin of the United States of America, of the present standard of weight and fineness, at its agency in the City of New York, and to pay interest thereon, at the rate of five per cent. per annum, in like gold coin, semi-annually on the first days of August and February in each year, from the ....day of ....190 .

The registered holder of this note may, at his option, transfer the same in person or by attorney duly authorized, upon the books of the Railway Company in the City of New York, or may exchange the same for a coupon note for the like principal sum with coupons attached maturing on and after the date when the next semi-annual instalment of interest would have been payable on such surrendered registered note.

All payments on this note, either of principal or interest, shall be without deduction for any taxes which the said Railway Company may be required to pay thereon or retain therefrom, under or by reason of any present or future law of the United States or of any State, County or Municipality therein.

The Blank Railway Company reserves the right to redeem this Note on any interest day prior to maturity on 30 days' notice at the rate of $101 per $100, and interest.

THE BLANK RAILWAY COMPANY,

By....................

ATTEST: Vice-President.

....

Assistant Secretary

Form of Stub:

No.

THE BLANK RAILWAY CO.

$5,000

5% 5-YEAR NOTE

REGISTERED

Issued to

Date of Issue.....................

Interest from.....................

Received the above described Note

............................190

....

Form of Power of Attorney:

FOR VALUE RECEIVED, ... hereby sell, assign and transfer unto .... the within Note of the Blank Railway Company, and do hereby irrevocably constitute and appoint .... Attorney to transfer said Note on the Books of the Railway Company in the City of New York, with full power of substitution in the premises.

Dated .... 190 .

....

WITNESS

....

The provisions of the last three paragraphs in the above form of note are no essential part of the form of registered note, but were inserted to meet the requirements of this particular note issue.

Coupon-Bearer Notes

In the above form of registered note, provision is made for its conversion, at the option of the holder, into a **coupon** note.

A **coupon,** or **coupon-bearer,** note, is one payable to bearer, and it therefore passes from hand to hand without the formality attaching to the transfer of registered notes.

Instead of the interest being paid to registered holders at the regular interest period, coupons are attached to the note, one for each amount of interest falling due throughout the life of the note. In the coupon form of the registered note given, the interest is payable semi-annually, and each payment amounts to 2½ per cent. upon $5,000, or $125. Therefore, if the note is dated August 1, 1904, Coupon No. 1 for $125 falls due on February 1, 1905, Coupon No. 2 for $125, being interest for the second six-months' period, falls due August 1, 1905, and so on until the maturity of the note. This being a five-year note, there would be ten coupons attached.

As the coupons mature they are detached, or **clipped,** as it is called, and are paid to bearer. It is customary to deposit coupons for collection by one's bank in the same manner as a check. The issuing company, upon payment of the coupon, cancels it. This canceled coupon should be filed as evidence of the payment of the interest.

The following is a form of the coupon:

Coupon No. 1.

$125.00. On February 1, 1905, THE BLANK RAILWAY COMPANY will pay the bearer at its agency in New York, One Hundred Twenty-five Dollars, in gold coin, being six months' interest then due on its Five per cent. Five Year Note No. 1001.

JOHN DOE, Treasurer.

The form of the note is substantially the same as the registered note, except that it provides for payment to bearer, payment of interest by coupons, and conversion, at option of holder, into the registered form.

In issuing a coupon-bearer note in exchange for a registered note, past due interest coupons are detached.

No attempt is made to keep a record of the holders of the coupon-bearer notes by the issuing company. As conversions are often made from one form to the other, it is convenient to maintain an account in the note ledger for Coupon-Bearer Notes, treating the total of such notes as though held by one person. This brings all the notes issued into the one record, and its total can be proved against the general ledger account.

The notes may be secured by the deposit of collateral with a trustee, in which case they may be known as **Collateral Trust Notes.** In fact, the provisions that may attach to such an issue are too numerous to specify, and little more than the general principles and procedures can be given.

Bonds

A **bond** is an obligation in writing and under seal. A fuller definition is that a bond is an instrument under seal whereby one acknowledges himself indebted to another in a specified sum, generally but not necessarily conditioned for the performance of some act. A **single** bond is one by which the obligor agrees to pay a certain sum of money to another at a determinable date. A **conditional** bond is one by which the obligation becomes void upon the performance by the obligor of some act, otherwise remaining in full force.

It is not the present purpose to consider all classes of bonds and the legal principles and distinctions that are applicable thereto, but merely to discuss that type, classified as a **single** bond, by which the obligor pledges himself and, if a natural person, his heirs, executors and administrators, or, if a corporation, its successors, to pay to another a certain sum of money at a future determinable date. The bonds that represent, to a large extent, the capital liabilities of corporations, belong to this class.

The most important difference between the notes that have already been described, and the common form of bond, is that a lien attaches by mortgage to certain property as security for the payment of the principal and interest of the bond. The distinction between the bond and the mortgage securing its payment, is important, and to aid in making the distinction, the various forms of mortgage-secured debt will be considered briefly.

The simplest and most readily understood procedure for the securing of debt by mortgage, and the one still in use in many of the states, is carried out by the borrower of money giving his promissory note therefor in the usual form. To secure the payment of the note, when due, a mortgage, or conditional transfer of certain property, usually real estate, is made to the payee named in the note. In case the maker of the note fails to perform the conditions of the note, then the payee may, in accordance with the provisions of the mortgage and of the statutes in relation thereto, proceed to advertise and sell the property mortgaged for his benefit, and apply the proceeds thereof towards the payment of the amount of principal and interest, due him upon the note, and his proper costs.

As a variation of this method of securing the payment of a loan, in New York and in other states, a bond and mortgage is given instead of a note secured by a mortgage. This type of bond is of the **conditional** class. The amount of the bond is usually for double the principal sum to be paid, the former being known as the **penal** sum. In case the obligor in the bond fails to meet his obligation, the property mortgaged as security to the bond can be sold, subject to the contract and statutory provisions, and the proceeds thereof applied to the payment of the principal sum, interest, costs, etc., the balance, if any, to be paid to the obligor. The penal amount of the bond is formal, and nothing beyond the actual amount due for the principal, interest and proper costs, can be collected. Originally the full amount of the bond could be collected, but the present rule is as stated. This is the procedure largely used in negotiating real estate loans.

The methods of borrowing money upon note and mortgage, or bond and mortgage, that have been described, answer the purpose well enough in small undertakings and in many real estate transactions, but where large amounts of capital are to be raised upon a security of this kind, especially when the nature of the undertaking is for a long term of years or perpetual, as in the case of public service corporations, it is found to be much more economical and satisfactory to issue the obligation in some denomination convenient for transfer and trading, and secure the payment of all of such obligations by the execution of one mortgage running to a trustee, whose right and duty it is to enforce the provisions of the

mortgage for the benefit of all of the holders of such bonds in case of a default in the payment of the agreed rate of interest or in the repayment of the principal.

The ordinary type of corporate bond is issued under the provisions of such a trust deed or mortgage. The bond is a written undertaking, under seal, to pay to bearer, or to the order of another, a certain sum of money at some future determinable date. As in the case of the issue of notes, it is convenient to issue bonds of some fixed denomination, as for example, $1,000 each. Although for convenience in selling and trading, the bonds are issued in certain denominations, in the general accounts of the corporation all of the bonds of a certain class are included and stated in one account.

The amount of the outstanding bonds of an issue rank, under usual conditions, as a capital liability, the cash, or other property received, being set up as an asset.

Authorized, but unissued, bonds are not carried into the accounts. If signed and sealed, although not actually delivered, they may be set up as Treasury Bonds, in order to charge the proper officer with their custody.

Coupon Bonds

The **coupon,** or **coupon-bearer,** form of mortgage bond is most acceptable to American investors. Like the coupon-bearer note, it passes from hand to hand without any formalities of transfer, and the interest is payable according to the tenor of interest coupons, alike payable to bearer, that are attached. A form of coupon-bearer bond issued by a railroad is as follows:

No.

UNITED STATES OF AMERICA

STATE OF MINNESOTA

THE BLANK RAILROAD COMPANY

$1,000 **$1,000**

FIRST MORTGAGE GOLD BOND

The Blank Railroad Company, a corporation organized and existing under the laws of the State of Minnesota, promises to pay to the bearer One Thousand Dollars ($1,000), in gold coin of the United States of, or equal to, the present standard of weight and fineness, at its office in the City of New York on the first day of October, one thousand nine hundred

and fifty, and on presentation and surrender of the annexed coupons as they shall severally become due, to pay interest, in like gold coin, on such principal sum at the rate of four per cent. (4%) per annum from the first day of October, in the year one thousand nine hundred, until such principal sum shall be paid, such interest being payable on the first day of April and October in each year at its office or agency in the City of New York.

This bond, with others of like tenor and date, is secured by a first mortgage bearing date the first day of October, A. D. 1900, to The Mercantile Trust Company, a corporation of the State of New York, as Trustee, conveying to said Trustee ninety-five and seventy one-hundredths (95.70) miles of completed railway, and a lease-hold estate in thirty-two miles of completed railway, against which the Railroad Company is authorized to issue, and the Trustee is directed to certify, Two Million Dollars ($2,000,000) of said bonds upon the execution and delivery of the mortgage.

The mortgage also provides that in case The Blank Railroad Company shall hereafter buy additional rolling stock, or build or otherwise acquire an extension of said ninety-five and seventy one-hundredths (95.70) miles of railroad, or build or otherwise acquire branches, and shall convey said rolling stock or extensions or branches to the Trustee to be held subject to the terms of said mortgage, additional bonds may be issued in respect to said rolling stock to an amount not exceeding the actual cost, and in no event to exceed Two Thousand Dollars ($2,000) per mile of completed road then owned by the Railroad Company and in respect to extensions and branches at the rate of Twenty Thousand Dollars ($20,000) per mile, and for the purpose of procuring additional ground and terminal facilities in the cities of Red Wing and Mankato, an additional amount not exceeding the actual expenditures and not exceeding One Hundred and Fifty Thousand Dollars ($150,000).

If default shall be made in the payment of interest which shall accrue upon any of the bonds secured by said mortgage, the principal thereof may be made due and payable as provided in said mortgage.

This bond shall not be valid until the certificate endorsed hereon shall have been duly executed by the Trustee.

IN WITNESS WHEREOF, The said Blank Railroad Company has caused the signatures of its President and Secretary to be affixed hereto this first day of October A. D. 1900.

The mortgage or deed of trust securing this bond has been duly stamped according to law.

THE BLANK RAILROAD COMPANY,
by

Attest:

. . . .
President.

. . . .
Secretary.

Attached to the foregoing bond were 100 interest coupons, covering the semi-annual interest payments for the fifty years of the life of the bond. The following is the form of the coupon:

The Blank Railroad Company will on the first day of April, A. D. 1901, pay to the Bearer at its office in the City of New York, Twenty Dollars ($20) in gold coin of the United States, being six months' interest then due on its First Mortgage Gold Bond No.	Coupon No. 1 **$20**

The coupon usually bears the engraved signature of the Treasurer.

As is usual in such cases, the bond does not come under the protection of the trust deed or mortgage unless it is authenticated by the trustee. For this purpose a trustee's certificate is provided, to be signed by the trustee, the form, in this case, being as follows:

TRUSTEE'S CERTIFICATE

The Mercantile Trust Company, a corporation of the State of New York, hereby certifies that this is one of the Bonds described in a certain mortgage or deed of trust, executed by The Blank Railroad Company to the undersigned as Trustee, bearing date the first day of October, 1900.

THE MERCANTILE TRUST COMPANY, Trustee,
by

. . . .
Vice-President.

Preservation of Paid Coupons

The paid coupons should be canceled as paid, and preserved in order that they may be presented to the Trustee, with the paid bonds, at the time of the retirement of the bonds. In case of the loss or destruction of any such bonds or coupons, the Trustee will require a bond, indemnifying it against loss through possible claims upon it for payment, usually for double the amount of the par of such bonds and coupons, before it

will execute a release of the trust deed or mortgage. This matter may be raised long before the maturity of the bond through consolidations or reorganizations that render the retirement of the issue desirable.

For the purpose of preserving such paid and canceled coupons, in case the issue is large, a book may be provided for each maturing coupon, in which spaces are given numbers to correspond with the numbers of the bonds. Thus, upon the maturity of the first coupon a book marked **Coupon No. 1** would be provided, with a space for coupon from bond 1, bond 2, bond 3, etc., the number being printed in the space, and each coupon as paid and canceled would be pasted in its respective place. Upon the maturity of the second coupon a book for **Coupon No. 2** would be provided, and so on. An inspection of the books would readily disclose the bonds for which coupons had not been paid.

In some cases the paid coupons are burned in the presence of representatives of the interested parties and an affidavit, known as a **cremation certificate,** is made of the fact, and this certificate is accepted by the trustee.

Registered Bonds

A purchaser of a negotiable instrument, in good faith, for value, acquires title thereto, although the vendor may have acquired the instrument by fraud and possessed no title. This has been held to apply to bonds, and there is thus constituted a danger in case the bonds fall into dishonest hands.

To overcome this, it may be provided that the **coupon-bearer** bonds can be converted into **registered** bonds. The conditions are similar to those stated in the case of registered notes, and the accounting records necessary are substantially the same. The interest is paid to the registered holder, usually by check. It is not considered necessary to include a form of registered bond.

Bonds Registered as to Principal

In lieu of a clause in the trust deed for full registry, provision may be made for the registry of the principal of the coupon-bearer bond. For this purpose, space is provided on the reverse of the bond in which the name of the owner may be recorded by the company, or its transfer agent, the ownership being recorded in the books of the company. Thereafter no new owner will be recognized except upon formal transfer by the registered owner. The bond may be assigned in blank, thereby reverting to its bearer form, or it may be assigned or transferred to another registered holder, whose name, in turn is entered on the bond and in the books of the company.

The interest is payable by bearer coupon and is not registered. The chance of loss, however, is reduced by this method to small proportions.

Classes of Bonds

Bonds have been classified, so far as their form is concerned, into **coupon-bearer, registered,** and **registered as to principal.**

Aside from the foregoing, they may be classified as to their nature, and bonds thus classified may take any one of the three forms stated. Thus, a **first mortgage** bond is one that is secured by a first lien on a particular property, although it may be in coupon-bearer, registered, or registered-as-to-principal form.

A **second mortgage** bond is one secured by a mortgage subject to a prior first lien, and, similarly, there may be a **third mortgage** bond, subject to two prior liens, although this is not so common.

A **collateral trust** bond is one secured, under the terms of a trust deed or contract, by the deposit of collateral securities. These may be mortgage bonds of other companies, which, in some cases, provide an interest return more than sufficient to pay the interest on the bonds secured. In such a case the surplus may be used to create a sinking fund to apply towards the payment of the bonds secured.

A **consolidated** bond is usually one secured by a mortgage on a property formed by the consolidation of several properties, and may be subject to prior liens on the various properties. In contradistinction, a **divisional** bond is one secured on a part of the property, as a branch railroad line.

A **convertible** bond is one that may be converted into some other security, usually capital stock, upon certain contingencies. Such a bond, from its convertibility, has more speculative possibilities, as a rule, than other forms of bonds.

An **income** bond is one providing for the payment of interest out of income, if earned. Thus, an income bond issued in 1903 provided that the payment of interest for the seven years ending 1910 should depend upon the earnings, and after 1910 the interest charge became absolute.

A **debenture** has been defined to be "an instrument in writing, generally under seal, creating a definite charge on a definite or indefinite fund or subject of property, payable to a given person, etc., and usually constituting one of a series of similar instruments." The term is applied to both stocks and bonds.

There are many titles given to bonds, words being chosen to convey briefly the essential characteristic of the security. The most common have been described.

Advanced Theory of Accounts.

ORGANIZATION AND FINANCE.

CORPORATIONS.

By HOMER ST. CLAIR PACE, C. P. A.

LECTURE IX.

LONG-TIME NOTES AND BONDS--.Continued.

ADVANCED THEORY OF ACCOUNTS.
ORGANIZATION AND FINANCE.

CORPORATIONS.

BY HOMER ST. CLAIR PACE, C. P. A.

LECTURE IX.

LONG-TIME NOTES AND BONDS—Continued.

Statutory Provisions.

It is provided by the New York Stock Corporations Law that, in addition to the powers conferred by the General Corporation Law, every stock corporation shall have the power to borrow money and contract debts when necessary for the transaction of its business or for the exercise of its corporate rights, privileges or franchises, or for any other lawful purpose of its incorporation; and it may issue and dispose of its obligations for any amount so borrowed, and may mortgage its property and franchises to secure the payment of such obligations, or of any debt contracted for said purposes. Every such mortgage, except purchase-money mortgages, and mortgages authorized by contracts made prior to May 1, 1891, shall be consented to by the holders of not less than two-thirds of the capital stock of the corporation, which consent shall be given either in writing or by vote at a special meeting of stockholders called for that purpose.

When authorized by like consent, the directors may confer upon the holder of any debt or obligation, whether secured or unsecured, evidenced by bonds of the corporation, the right to convert the principal thereof, after two and not more than twelve years after the date of such bonds, into stock of the corporation.

There is a special provision in the Railway Law applicable to the issue of bonds by railroad companies, which it is not necessary to consider at this time.

The provision of the New York Law that no corporation shall issue stock or bonds except for money, labor done or property actually received

for the use and lawful purposes of the corporation, states that property purchased may be paid for in stock to the amount of the value thereof, but it does not provide that the money, labor done or property received for bonds shall equal in value the par value of such bonds. Thus, while stock may not be issued for less than the par value, there is apparently no such limitation in the statute upon the issue of bonds.

Under the New York law, the owner or holder of any corporate or municipal bond or obligation (except such as are designated to circulate as money, payable to bearer), heretofore and hereafter issued in, and payable in, New York, but not registered in pursuance of any State law, may make such bond or obligation, or the interest coupon appending to the same, non-negotiable by subscribing his name to a statement endorsed thereon that such bond or obligation or coupon, is his property, and thereafter the principal sum therein mentioned is payable only to such owner or holder, or his legal representatives or assigns, unless such bond, obligation or coupon be transferred by endorsement in blank, or payable to bearer, or to order, with the addition of the assignor's place of residence.

Bonds Sold at a Discount.

In case a bond is sold at exactly the amount of its par, an asset is received equal in amount to the liability set up, and the interest that is properly a charge on account thereof is the rate named in the obligation itself.

It is not unusual, however, for bonds to be sold at a discount, or premium, depending upon the security of the obligation and the prevailing rates of interest in the money market. Thus, a bond that bears a nominal interest rate of 4 per cent. say, in case the ruling rate for money loaned on obligations of equal security is 5 per cent., would not sell except at a discount, say, to illustrate, at 90. The 10 per cent. discount is the penalty exacted because the nominal rate named in the bond is not sufficient to give the current return upon the investment. It is an addition to the nominal interest rate, which, instead of being paid in money from time to time as the interest periods mature, is settled with the holder of the security in the first instance by the purchaser's receiving a bond, part of which is issued to make good an insufficient nominal interest consideration.

In the case of the sale of one hundred bonds of the par value of $1,000 each, amounting to $100,000, bearing interest at 4 per cent., at a price of 90, Cash would be charged with the proceeds, $90,000, Discount on Bonds with the amount of discount, $10,000, and Mortgage Bonds would be credited with the total, $100,000, the latter to record the liability.

The practice of capitalizing, or carrying to the cost of property, such discount on bonds is not infrequently met in practice, and is theoretically incorrect because it does not represent asset value, but an amount that should be a charge against profits on account of interest, distributed over the life of the bond.

It being assumed that the term of the $100,000 of bonds is ten years, and the questions of compound interest necessary to determine the exact amount chargeable against profits each year being disregarded, it may be approximated that, inasmuch as the bonds are for ten years one-tenth of the discount should be charged against profits each year in addition to the nominal interest charge, giving a net charge on account of interest of five per cent. a year. This procedure would be carried out by setting up, in the first instance, the entire amount of the discount, and holding it upon the books as a **deferred charge,** debiting, at the time of closing the books each year, the proportionate amount for that year, against Profit & Loss. The nominal interest, being the amount actually paid in cash, is also charged to Profit & Loss, the latter thus receiving as a debit the full amount chargeable on account of interest. The Discount Account, standing as a deferred charge, will be reduced year by year by the credits until, at the time of the maturity of the bonds, it will have disappeared from the books.

It is interesting to trace this procedure a step further, in order to fix the principle clearly in mind. It will be recalled that, in the first place, a liability of $100,000 was set up, for which assets, amounting to only $90,000, were received. It is necessary to accumulate in the business during the life of the bond, an additional $10,000 of assets, so that there may be available, in conjunction with the $90,000 of assets, an amount sufficient to equal the amount of the maturing bonds. The accounting procedure that has been outlined merely provides for this by withholding from profit during the life of the bond $10,000, representing asset value to that amount on the debit side of the accounts. It is not intended to convey the impression that the assets thus accumulated are specifically ear-marked, or accumulated in a sinking fund, but merely that general asset value is withheld from profit distribution in order to keep the accounts in accordance with sound accounting principles.

Sale of Bonds at a Premium.

The condition may be found of a sale of bonds at a premium, that is, at a price in excess of the par value, and such excess should be credited to a distinct account that may be called Premium on Bonds Sold Account or Bond Premium Account. The incorrect practice of treating such a

premium as a profit or surplus is sometimes carried out. However, the principles governing the sale of bonds at a discount apply here, except that the opposite condition is found. The nominal interest rate specified in the bond itself is so high, in conjunction with the security afforded, that the bonds sell for a price in excess of par, and the premium so received is an amount paid in advance by the purchaser for the privilege of collecting the nominal rate specified in the bonds during successive interest periods. So far as the corporation is concerned, it is an amount received against an amount later to be paid as interest, and should be used as a reduction of the nominal interest charge.

Thus, if an issue of bonds is sold at 110, say, $100,000 of bonds at $110,000, bearing six per cent. interest, maturing in twenty years, the annual interest charge thereon would be $6,000. Disregarding questions of compound interest, at the end of the first year, assuming that the interest were paid annually, a proportionate amount of the premium should be transferred from the Premium Account to Profit & Loss, say one-twentieth, or $500. The nominal interest, $6,000, is then charged against Profit & Loss, and the correct net effect of a charge of $5,500, on account of interest is secured. The Premium Account will then stand credited with $9,500, being the amount applicable to the reduction of the nominal interest during the remaining nineteen years of the life of the bond. The same result may be achieved by other methods, but the principle is as stated.

If, instead of this procedure, the Premium Account were held at its full amount, and the nominal interest were charged against each Profit & Loss period, the amount of such Premium Account would be a true surplus at the time of the maturity of the bond, growing out of the fact that Profit & Loss had been overcharged during each Profit & Loss period by the failure to take into account the proportionate amount of the premium.

Bonds Issued for Property.

In case of the receipt of property for an issue of bonds, instead of the receipt of money, the same principles apply in case the value of the property, determined in the best manner possible, varies from the par of the bonds. The appraisement of the property is a matter to be considered upon the merits of each individual case, although ordinarily the asset would be set up at the amount of the liability incurred on account thereof.

Sale of Stock at a Premium.

The sale of stock at an amount above its par is not uncommon, and the amount of such excess constitutes a surplus that, in ordinary con-

servative practice, is held for the uses of the corporation. Such a surplus, however, may be distributed as profit.

The surplus created by the issue of stock at a premium should not be confused with the premium received on account of an issue of bonds, for the reason that stock is not a liability, and does not come due at any time nor in any amount. The return upon stock is in the nature of a dividend, or a sharing of profits, and is not interest that can be accrued from day to day. Therefore, the whole theory of payment for the use of money involved in an issue of bonds bearing interest does not apply to stock.

The amount of the premium received on an issue of stock should not be confused with the profit derived from trading or operation, but should be carried into Profit & Loss or Income in a division created for such extraordinary items.

Purchase and Sale of Bonds.

It is now the rule upon the New York Stock Exchange to quote the prices on bonds without interest, the amount of the accrued interest being added to the price of the bond. Thus if a bond is sold at 90, the price is calculated as 90 per cent. of the par, less the broker's commission, and plus the amount of interest that has accrued to the date of delivery. In the case of the sale at 90 of a four per cent. bond of the par value of $1,000, interest payable on the first days of October and April in each year, sold for delivery on November 13, the price will be calculated as 90 per cent. of $1,000, or $900, less the broker's commission of one-eighth of one per cent. of the par value of the bond, $1.25, and plus interest at four per cent on the par value of the bond, for one month and twelve days, $4.66, amounting to $903.41.

A security, whether a bond or otherwise, is recorded in the accounts at its cost, irrespective of its par value. Thus, in the illustration given the purchaser will add to the price of 90 the commission, giving the purchase price of the bond proper as $901.25. The accrued interest may be best charged to an Accrued Interest Account, which will be credited to balance the charge upon the collection of the interest.

The commission of a stock broker is always calculated upon the par of the security, whether a stock or bond, and is figured at one-eighth of one per cent. It is deducted from the proceeds of securities sold, and is added to the cost of securities purchased, making the net price one-eighth of one per cent. less or more than the quoted price, as the case may be.

It is often found useful, notwithstanding the fact that securities are recorded at cost instead of par, to record the par of the security in

the explanation column on the debit side of the ledger as purchases are made, and to record the par of the security in the explanation column on the credit side of the ledger as sales are made, so that, by obtaining the difference between the par, recorded in such explanatory columns, the par value of the securities on hand may be determined. This does not affect in any way the regular money columns. The procedure is useful in determining the par value of any security on hand and in checking against securities held in a vault. The shares may be used instead of par value in the case of stocks.

Premium on Bonds Purchased.

In the case of the purchase of bonds for investment purposes at a premium, that is, at a price in excess of the par value, such premium is an amount paid for the privilege of collecting the nominal interest rate specified in the bond, and in order to determine the net interest return, it is necessary to charge against the nominal return for each interest period a proportionate amount of the premium thus paid. Thus, in the case of the purchase of a bond of $1,000 par value, maturing in ten years, at a premium of 10 per cent., bearing a nominal interest rate of 4 per cent. per annum, the bond will fall due to be paid upon maturity, not at the cost thereof, $1,100, but at the par value thereof, $1,000. Therefore, the amount of this premium must be withheld from the nominal interest collected, in order not to overstate net profits or income.

In order to record the purchase of the bond, the entire amount, excluding the accrued interest at the time of the purchase, but including the excess amount paid over the par value of the bond, may be charged to a bond account under a suitable caption. At the time of the receipt of the nominal interest, Cash is charged and Interest is credited for the full amount thereof less the proportionate amount necessary to reduce the premium. This proportionate amount is credited to the bond account. This procedure being carried out for each interest period, the bond account, during the life of the bond, will be written down to its par value. There are several accounting procedures by which this result may be accomplished, but the one given illustrates fully the principles.

Discount on Bonds Purchased.

In case of the purchase of a bond at less than par, inasmuch as an obligation is held that will mature and be collectible at an amount in excess of its cost, in theory the amount of such excess is an addition to the nominal interest received. The omission of such increment results in nothing more than the omission of an unrealized profit.

Payment of Coupons.

The payment of coupons is usually made by establishing, with a bank or other financial institution, a fund equal to the amount of the maturing coupons. This is set aside by the bank from other accounts and funds and is held especially for the purpose of paying the coupons as they are presented. Through the absence of holders of bonds, or through the loss or destruction of bonds or coupons, it often happens that there is a balance left with the bank or other agent on account of coupons, payment for which has not been demanded. The amount thus left belongs, in the absence of claimants, to the corporation, and it is therefore desirable to have a record of the amount on the books of the corporation. Were the corporation, in its accounts, to charge off to Interest Account the full amount of the coupons, no record would exist. The better practice is to charge Interest and credit Coupons Payable, for the full amount of the maturing coupon. At the end of each month, a statement of coupons paid is received from the bank, or other disbursing agent, and the amount thereof is charged to Coupons Payable, and the special fund, which before has been set up as a charge to the bank, is credited. There will thus exist at the end of each month, after the accounts are written up, a net charge to the bank or other agent for the amount of funds not disbursed, and on the other side of the accounts a balance to Coupons Payable, measuring the liability for coupons due, but not presented.

There usually is a provision in a mortgage to the effect that the corporation or its agent shall pay the coupons as they mature, and the selection of such an agent is a matter entirely within the power of the corporation. Therefore, any balance of funds on hand with an agent is merely held for the purpose of meeting the payment of the coupons whenever presented. In the absence of presentation of coupons the fund would belong to the corporation, and it is desirable and necessary not to eliminate the amount thereof from the corporate records.

In case a bank or trust company is allowing interest upon cash balances, the interest upon funds set aside for the purpose of paying coupons ceases from the time of such transfer from the general fund. While a large percentage of coupons would be presented on the date of maturity, there are many that do not come in for weeks and months, and in some cases even years, after the due date. Bankers not infrequently do not make a special charge for the payment of coupons, especially when the amounts are large, receiving their compensation therefor by thus setting aside the fund and receiving the benefit of the use of the portions not immediately called for payment.

Surplus Created by Reduction of Stock.

The distinction between operating surplus, available for dividend purposes, and surplus created by the reduction of capital, may become important when the question of dividends upon preferred stock arises. In the case of Roberts vs. Roberts-Wicks Company, 184 New York 257, this question was discussed at length and decided, as will appear from the following extracts:

> "The capital had become impaired to the extent of upwards of $90,000 and no dividends had been declared to its stockholders.
>
> "In the charter and in the certificates issued to the preferred stockholders, it was stated what was to be the nature of the preference which was accorded to that class (preferred) of stockholders; namely, to be paid 'out of the surplus profits arising from the business of the corporation' a dividend equal to 6 per cent. per annum on the preferred stock before any dividend shall be paid on the common stock; such dividend on the preferred stock shall be cumulative.
>
> "Each class of stock was part of the whole capital stock and both classes were made by the charter alike in all respects, except in the one respect that the preferred stock was entitled to have 'the surplus profits arising from the business' appropriated, in first order, to the payment of 6 per cent. dividends, cumulatively.
>
> "When * * * directors met to act upon the question of dividends, their duty was, in dividing the surplus profits, to apply them, in first order, to the satisfaction of the debt to the preferred stockholders for arrears of dividends.
>
> "For the purpose of such a dividend, however, only such surplus as represented the profits from the business could, legally, be availed of, and this brings us to consider the question of the disposition of the surplus of capital, left upon the reduction of capital stock, which the appellant claims to be equivalent to surplus profits and, hence, to be applicable upon the company's debt to the preferred stockholders on account of arrears of dividends. * * * As stated, the capital had become impaired to the extent of $90,861.85, and this necessitated the reduction as then effected. The reduction to $200,000 thus left $9,138.15, which was an excess, or surplus, of capital. We may assume that the directors could have converted it into cash and have distributed it by way of dividends; but the preferential right of the preferred stockholders did not reach to a distribution of that which was capital, nor create any charge upon capital. That which constitutes the capital stock of a corporation belongs to all of its stockholders, proportionately to their holdings. Upon dissolution, or in liquidation, it entitles him to share ratably in the assets. If the

directors had undertaken to divide this surplus of capital, it was apportionable, only, among all the stockholders ratably. The statute contemplated nothing else than that.

"The statute reads: 'If the capital stock is reduced, the amount of capital over and above the amount of reduced capital shall, if the meeting so determine, be returned to the stockholders pro rata.

"Assuming that the directors were empowered to distribute this surplus of capital, the preferred stockholders would have no legal, or equitable, claim upon it in satisfaction of past due dividends. Their only right would be to share in such a distribution ratably with the common stockholders.

"It must be borne in mind that the $9,138.15 remained in the corporate accounts, after the reduction of capital stock, as a portion of the former capital, and was, in no sense, like an excess of property which had been accumulated in the conduct of the business beyond the fixed capital. It did not represent 'surplus profits arising from the business.'

"I have, therefore, reached the conclusion as to this surplus of capital, left on hand after the reduction of the capital stock from $300,000 to $200,000, that it was not applicable to the claim of the preferred stockholders for the arrears of unpaid dividends."

Consolidated Balance Sheet.

Corporations in many cases are authorized to acquire and hold the capital stock of other corporations. In practice, the holdings may vary from a few shares purchased for investment, or speculation, to a condition where practically all of the stock of another corporation is held. In fact, the corporation may be a **holding** corporation, organized merely to hold the stock of other corporations, all of the actual activities being carried on by the corporations whose stock is held and controlled.

In the case of the control of a corporation resting in another corporation, the controlled corporation is known as a **subsidiary** corporation and the corporation owning the stock is known as a **holding,** or **parent,** corporation, although the term **holding** is applied most often to corporations that do not themselves conduct activities but merely hold the stocks of operating companies. Aside from the legal complications that arise in such circumstances, there are many important matters to be considered from an accounting point of view.

The balance sheet of each corporation will, if properly prepared, disclose its financial position, but it is difficult to obtain, from a study of the separate statements of parent and subsidiary corporations an idea of the condition of the enterprise as a whole. This is desirable, in view

of the fact that, so far as actual ownership is concerned, the activities practically constitute a single enterprise.

In order that the situation may be readily grasped an illustration will be given. Corporation A is capitalized at $1,000,000 and has a surplus, that is, an excess of asset value over the combined amount of liabilities and capital stock, of $200,000. It owns 90 per cent. of the stock of Corporation B, capitalized at $100,000, which it acquired and charged in its accounts at par. Corporation A also owns all of the stock of Corporation C, capitalized at $50,000, which it acquired and charged at 95 cents on the dollar. The balance sheets of the respective corporations may be stated, for the purpose of illustration, as under:

BALANCE SHEET OF CORPORATION A
December 31, 1902

Assets		*Liabilities*	
Capital Assets	$950,000	Capital Stock.......	$1,000,000
Stock of subsidiary corporations:		Capital Liabilities....	100,000
Corporation B at par	90,000	Current Liabilities...	35,000
Corporation C at 95..	47,500	Surplus............	200,000
Current Assets........	247,500		
	$1,335,000		$1,335,000

BALANCE SHEET OF CORPORATION B
December 31, 1902

Assets		*Liabilities*	
Capital Assets	$230,000	Capital Stock.......	$100,000
Current Assets.........	70,000	Current Liabilities...	125,000
		Surplus............	75,000
	$300,000		$300,000

BALANCE SHEET OF CORPORATION C

December 31, 1902

Assets		*Liabilities*	
Capital Assets........	$50,000	Capital Stock.......	$50,000
Current Assets........	95,000	Capital Liabilities...	40,000
Deficit..............	25,000	Current Liabilities...	80,000
	$170,000		$170,000

The book value of the stock of a corporation is the amount by which the assets, correctly valued, exceed the liabilities. Stated in another way, it is the amount of capital stock plus the surplus or less the deficit. Thus, the book value of the Capital Stock of Corporation B above is $175,000, or $175 to each $100 of stock. The book value in such a case would be stated as 175.

Inasmuch as the stocks of Corporations B and C are carried in the Balance Sheet of Corporation A, at cost, the full effect of the values that exist in the subsidiary corporations is not disclosed. This effect may be shown by adjusting the value of the subsidiary stocks as carried in A's books to book value. In the case of the stock of B 75 per cent. would have to be added to the $90,000, or $67,500, making the total value $157,500, and the $67,500 would be credited to surplus. In the case of the stock of C, the book value is only 50, or $25,000, so the shrink, $22,500, must be charged to Surplus and credited to Stock of Corporation C. Surplus, after these adjustments, would stand with a credit balance of $245,000.

This expedient, while disclosing in the Balance Sheet of Corporation A the net condition in accordance with the best values obtainable, would not disclose the full facts as to the assets and liabilities of the respective subsidiary corporations, and it would be clumsy to carry through such adjustments as the book values of the stocks of the subsidiary corporations fluctuated.

Instead of the foregoing, a better accounting procedure is to prepare a statement known as a **Consolidated Balance Sheet,** in which all of the assets and outstanding liabilities, and the stock issued and in the hands of outside parties, are shown. This is prepared without the necessity for adjustment entries, by a consolidation of the items in the various financial statements. It is obvious that the use of the actual assets and liabilities in such a statement, with the elimination of the stock owner-

ship, will give the same net effect upon Surplus as the use of the net increases and decreases of book value.

Thus, the Capital assets would be shown in the consolidated statement as $1,230,000, made up as follows:

A	$950,000
B	230,000
C	50,000
	$1,230,000

In the same manner other items would be consolidated, but the ownership of the subsidiary companies' stock appearing in the parent corporation as a debit balance, and its issue appearing in the subsidiary corporations as credit balances, would be eliminated.

The Consolidated Balance Sheet when thus prepared would appear as follows:

CONSOLIDATED BALANCE SHEET OF CORPORATIONS A, B AND C AS AT DECEMBER 31, 1902

Assets		*Liabilities*		
Capital Assets	$1,230,000	Capital Stock A		$1,000,000
Current Assets	412,500	Capital Stock B	$10,000	
		Surplus	7,500	
				17,500
		Capital Liabilities		140,000
		Current Liabilities		240,000
		Surplus		245,000
	$1,642,500			$1,642,500

The same surplus, $245,000, is achieved as in the case of the adjustment entries. Instead, however, of the net asset value of A's holdings in each subsidiary corporation being shown, the entire assets and the entire liabilities are shown, presenting a much fuller financial statement.

In case a portion of the stock of a subsidiary corporation is held by outside interests, the theoretical treatment is to apportion to it its share of the surplus or deficit, and show the net effect in the Consolidated Balance Sheet. In the case of the $10,000 of B stock outstanding, the surplus applicable thereto on the basis of values shown, $7,500, is added to the amount of the stock, to show the estimated interest of the holders

of such stock in case of a realization and liquidation on the basis shown. In practice, when the outstanding stock is small in amount, it is often carried into the statement at par.

The liabilities rank against the assets of the corporation for which they are incurred, and not against the assets as a whole. This however, does not affect the showing of the financial condition of the entire enterprise, and reference may be had to the subsidiary balance sheets, which should always support the consolidated statement, for information as to the liabilities of the respective corporations.

The Consolidated Balance Sheet is one of the accounting devices that has come with the tendency to consolidate corporate interests. It is principally useful where practically the entire ownership of subsidiary concerns rests in a holding corporation.

Condensed General Balance Sheet of United States Steel Corporation.

For the purpose of illustrating the principles of the consolidated balance sheet, the financial statement of the United States Steel Corporation as at December 31, 1906, as published, is presented herewith as a complicated example, and it is believed that a careful study thereof will well repay the student.

It will be noted, in the first place, that the term **Condensed General Balance Sheet** is used instead of **Consolidated Balance Sheet,** although it embraces the assets and liabilities of subsidiary corporations as well as of the parent corporation. Either designation will answer, although some confusion might result from the fact that the term **Condensed Balance Sheet** is often used, especially in railway practice, to describe a balance sheet that does not include the assets and liabilities of subsidiary corporations, but is merely a condensation of the ordinary balance sheet of the parent company. In the statement under review the idea of the consolidation may be gathered from the word **General,** which is used with the word **Condensed.**

Under the caption **Liabilities** are included the stocks of subsidiary companies not held by the United States Steel Corporation, which are stated at par value. It has already been pointed out that when the amounts of stock thus outstanding are inconsiderable, they are usually taken into the statement at par.

Incidentally, the treatment of deferred charges to operations, sinking and reserve funds, and surplus, will be of interest to the student.

UNITED STATES

CONDENSED GENERAL BALANCE

ASSETS.

PROPERTY ACCOUNT:			
PROPERTIES OWNED AND OPERATED BY THE SEVERAL COMPANIES:			
Balance of this account as of December 31, 1905		$1,380,031,032.25	
Adjustments during 1906 in foregoing balance		84,823.16	
Expended for Additional Property and Construction in 1906		32,155,146.46	
		$1,412,271,001.87	
Less: Charged off to the following accounts, viz.:			
To Bond Sinking Funds	$1,406,500.00		
To Depreciation and Extinguishment Funds	2,063,052.54		
To Funds provided from Surplus Net Income for payment of capital expenditures	30,615,844.26		
		34,085,396.80	
		$1,378,185,605.07	
Expenditures for Stripping and Development at Mines, viz.:			
Balance at December 31, 1905	$4,016,985.45		
Net Increase during the year 1906	1,705,355.16		
		5,722,340.61	
			$1,383,907,945.68
DEFERRED CHARGES TO OPERATIONS:			
Payments for Advanced Mining Royalties, Exploration Expenses and Miscellaneous charges, chargeable to future operations of the properties		$4,272,621.94	
Less: Fund reserved from Surplus to cover possible failure to realize Advanced Mining Royalties		2,500,000.00	
			1,772,621.94
INVESTMENTS:			
Outside Real Estate and Other Property			1,617,351.29
SINKING AND RESERVE FUND ASSETS:			
Cash held by Trustees account of Bond Sinking Funds		$397,287.89	
($24,767,500 par value of Redeemed Bonds held by Trustees, not treated as an asset.)			
Contingent Fund and Miscellaneous Assets		1,542,398.24	
Insurance Fund Assets (at cost)		3,649,970.74	
Depreciation and Extinguishment Fund Assets (at cost)		11,708,499.14	
Investments (at cost) for Special Construction Fund for Gary Plant		10,145,788.59	
			27,443,944.60
CURRENT ASSETS:			
Inventories*		$119,897,466.73	
Accounts Receivable		58,836,772.50	
Bills Receivable, Customers		4,203,933.30	
Agents' Balances		672,576.16	
Sundry Marketable Bonds and Stocks		7,720,348.35	
Loans on Collateral		7,600,000.00	
Cash, viz.:			
In hand and on deposit with Banks, Bankers and Trust Companies subject to cheque	$62,812,418.49		
Deposits loaned on call	2,824,390.35		
Time Certificates of Deposit	2,000,000.00		
		67,636,808.84	
			266,567,905.88
			$1,681,309,769.39

* Inventory valuations include profits accrued to subsidiary companies on materials and products sold to other subsidiary companies and undisposed of by the latter—see contra specific surplus account for these profits. The total of all inventories is, however, below the actual current market prices.

TEEL CORPORATION

HEET, DECEMBER 31, 1906.

LIABILITIES.

APITAL STOCK OF U. S. STEEL CORPORATION:			
Common		$508,302,500.00	
Preferred		360,281,100.00	
			$868,583,600.00
APITAL STOCKS OF SUBSIDIARY COMPANIES NOT HELD BY U. S. STEEL CORPORATION (*Par Value*)			23,400.00
ONDED AND DEBENTURE DEBT:			
United States Steel Corporation 50 Year 5% Bonds	$303,957,000.00		
United States Steel Corporation 10–60 Year 5% Bonds	170,000,000.00		
	$473,957,000.00		
Less: Redeemed and held by Trustees of Sink'g Funds	18,956,500.00		
Balance outstanding		$455,000,500.00	
Subsidiary Cos.' Bds. (Grtd. by U. S. Steel Corp'n)	$48,624,000.00		
Subsidiary Cos.' Bds. (Not grtd. by U. S. Steel Corp'n).	64,307,680.41		
	$112,931,680.41		
Less: Redeemed and held by Trustees of Sink'g Funds	5,811,000.00		
Balance outstanding		107,120,680.41	
Debenture Scrip, Illinois Steel Company		35,069.18	
			562,156,249.59
APITAL OBLIGATIONS AUTHORIZED OR CREATED FOR CAPITAL EXPENDITURES MADE (HELD IN THE TREASURY SUBJECT TO SALE, BUT NOT INCLUDED IN ASSETS):			
U. S. Steel Corporation 10–60 Year 5% Bonds		$30,000,000.00	
Subsidiary Companies' Bonds		10,320,000.00	
Total, not included in General Balance Sheet Assets or Liabilities		$40,320,000.00	— — —
ORTGAGES AND PURCHASE MONEY OBLIGATIONS OF SUBSIDIARY COMPANIES:			
Mortgages		$2,514,626.37	
Purchase Money Obligations		1,717,500.00	
			4,232,126.37
URRENT LIABILITIES:			
Current Accounts Payable and Pay Rolls		23,853,579.40	
Special Deposits or Loans due employes and others		1,077,292,29	
Accrued Taxes not yet due		2,728,361.61	
Accrued Interest and Unpresented Coupons		7,166,344.29	
Preferred Stock Dividend No. 23, Payable February 28, 1907		6,304,919.25	
Common Stock Dividend No. 13, Payable March 30, 1907		2,541,512.50	
			43,672,009.34
Total Capital and Current Liabilities			$1,478,667,385.30
INKING AND RESERVE FUNDS:			
Sinking, Depreciation and Replacement Funds		$38,665,489.73	
General Construction Fund for authorized appropriations		3,057,059.15	
Special Construction Fund for account Gary, Ind., Plant		26,867,797.89	
Contingent and Miscellaneous Operating Funds		7,424,705.80	
Insurance Funds		3,741,829.28	
			79,756,881.85
OND SINKING FUNDS WITH ACCRETIONS			25,164,787.89
Represented by Cash (and by redeemed bonds not treated as assets—See Contra).			
NDIVIDED SURPLUS OF U. S. STEEL CORPORATION AND SUBSIDIARY COMPANIES:			
Capital Surplus provided in organization		$25,000,000.00	
Balance of Surplus accumulated by all companies from April 1, 1901, to December 31, 1906		54,556,654.01	
Total Surplus exclusive of Subsidiary Companies' Inter-Company Profits in Inventories		$79,556,654.01	
Undivided Surplus of Subsidiary Companies, representing Profits accrued on sale of materials and products to other Subsidiary Companies, on hand in latter's Inventories		18,164,060.34	
			97,720,714.35
			$1,681,309,769.39

ADVANCED THEORY AND PRACTICE OF ACCOUNTS.

ORGANIZATION AND FINANCE.

CORPORATIONS.

BY HOMER ST. CLAIR PACE, C. P. A. (N. Y.)

LECTURE X.

SYNDICATES.

Advanced Theory and Practice of Accounts.

ORGANIZATION AND FINANCE.

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LECTURE X.

SYNDICATES.

In General.

A syndicate is an association of persons, formed for the furtherance of some object, usually one involving the contribution, temporarily, of large amounts of capital, or the agreement so to contribute. A syndicate is not in the nature of a corporation, although ordinarily used as an aid to corporate activities. It more nearly approaches a special partnership, organized for carrying out a particular undertaking. The attempt is usually made, in the agreement constituting the syndicate, to relieve the members thereof, **inter se,** of partnership responsibilities.

As distinguished from a syndicate, the term **promoters** is usually applied to the persons who assist in organizing joint stock companies or corporations. Thus, promoters are those that have to do more particularly with the steps preliminary to the organization of a corporation. A syndicate is rarely organized for such a purpose.

The usual form of organization is an agreement between a syndicate **manager** or **managers,** and certain persons known as **subscribers** or **participants,** reduced to writing, and subscribed by the parties thereto, setting forth the name and object of the syndicate, and stating the mutual agreements, undertakings and responsibilities of the managers and participants. The syndicate agreement, in order to facilitate its execution by a large number of subscribers, may be made in many copies, and each, by the terms of the contract, may be deemed an original, with full force and effect.

The agreement usually provides that the syndicate shall become binding upon the subscribers when subscriptions have been received for a certain specified amount of capital.

The name and object of the syndicate, and the duties, powers, responsibilities and compensation of the managers are usually set forth in detail. The compensation of the managers is usually fixed as a percentage upon the capital of the syndicate. A syndicate secretary may be provided, although the appointment of a secretary, and such agents and employees as may be necessary for the purposes of the syndicate, usually falls within the powers of the syndicate managers.

There are no requirements in this country, at least, that a syndicate shall file reports or disclose the nature of its business or operations. For this reason, the syndicate method has advantages in certain classes of undertakings. For example, in case a railroad company desires to acquire real estate for the purpose of making an improvement, as, for example, the building of a station, the entry of the railroad company into the market for the real estate would have a tendency to advance prices. Such an operation could be better carried out either by individuals, or by an association of individuals in the form of a syndicate.

The method of organization by which managers have full power, without the action of a board of directors, to carry out the objects of a syndicate, while not suited to the needs of permanent business, lends itself well, when not abused, to the successful accomplishment of the purposes for which syndicates are organized.

Syndicate enterprises are often highly speculative, and unsuited, for that reason, for permanent organization in the corporate form.

For the reasons given, and others that may exist, resort is often had to the syndicate method of pooling capital, and the treatment of the accounts that arise in connection therewith becomes of importance to the Accountancy student.

Form of Syndicate Agreement.

In order that the student may study the organization of a syndicate, and obtain an idea of the powers and responsibilities of the parties thereto, and the accounting contingencies likely to arise, it is deemed expedient to reproduce herewith a typical syndicate agreement. The one given is for a construction syndicate, although, with the objects changed, it would answer for any undertaking. It is as follows:

Railway Building Syndicate.

This Agreement, Dated this first day of February, 1900, by and between John Doe, hereinafter called the "Syndicate Manager," party of the first part, and the syndicate subscribers hereto, severally parties of the second part, of whom each is hereinafter termed the "Syndicate

Subscriber," and all of whom, together with said John Doe, constitute the syndicate, to be known as the "Railway Building Syndicate."

WHEREAS, It is proposed by the Syndicate Manager to complete certain negotiations now in progress for the purchase provided he can do so upon reasonable terms, of the Indiana Railroad, a line of railroad with 150 miles of main track, extending from........................to ....with certain coal lands, and having completed the purchase of said railroad, but not otherwise, to extend said line of railroad from....................to....................a distance of about fifty (50) miles, and to purchase rolling stock, if found necessary or desirable in the opinion of the Syndicate Manager; and

WHEREAS, For the purpose of providing the necessary money for the purchase and construction of said properties for the purposes herein set forth, said Syndicate Manager and the Subscribers hereto wish to form a syndicate to advance the necessary money; not exceeding in amount $3,500,000;

NOW THIS AGREEMENT WITNESSETH, That, in consideration of the premises, and of their mutual agreements, the Syndicate Manager and the Syndicate Subscribers hereto severally agree with each other, as follows:

1. The parties hereto form a Syndicate for the purpose of purchasing and acquiring the Indiana Railroad, hereinbefore described, and having purchased said railroad, but not otherwise, of constructing the lines hereinbefore described, and to make such additions and improvements as the Syndicate Manager may deem desirable, and having acquired the same, merging, operating, controlling and disposing of the same as may be determined by the Syndicate Manager to be for the benefit of such Syndicate.

2. Each Subscriber hereto, and to any counterpart hereof, shall set opposite his name the amount of his subscription to the Syndicate, and shall be called upon to pay, or to be liable only for such amount, as shall bear to the obligations of the Syndicate, not exceeding $3,500,000, the same ratio or proportion as his subscription bears to said maximum obligation. In the event that more than the aggregate amount of $3,500,000 is subscribed, the Syndicate Manager may reduce any or all subscriptions hereto in such an amount, in his discretion, as shall make the aggregate subscription $3,500,000, and in case any such reduction shall be made, the Syndicate Manager shall notify the Subscribers whose subscriptions have been reduced, of the amount of such reduction. The funds of the Syndicate shall be applied, used and disbursed by the Syndicate Manager.

3. The Syndicate Manager agrees to proceed with reasonable diligence to purchase said Railroad, at such prices and upon such terms of

payment as shall, in his judgment, be reasonable and the best obtainable in the circumstances, and having made such purchase, said Syndicate Manager shall deposit with a Trust Company to be selected by him, the contract or evidence of such purchase, showing the terms and conditions thereof, and thereafter proceed with the construction of the new lines above described.

4. The Syndicate Subscribers irrevocably name and appoint the Syndicate Manager their agent and attorney with full power and authority to do any and all acts, and enter into and execute any and all agreements or other instruments necessary or proper, or by the Syndicate Manager deemed expedient in the premises, to carry out and perform the said agreement for the purchase of the said Indiana Railroad, and the construction of the new lines hereinbefore described, and to that end absolutely to control the property so purchased and constructed as fully in all respects as if he were the absolute owner thereof, with power to borrow money thereon and pledge the property or any portion thereof as security therefor, and to sell and dispose of the same upon such terms as may be in his discretion for the interest of this Syndicate, and with like power to hold, manage, control and dispose of, in his discretion, any and all stocks and securities acquired on any sale or disposal of said property, or any part thereof; also, in his discretion, to organize a railway company to hold the title of the lines purchased and constructed, in pursuance of this contract, and to cause such company to issue such securities as it may deem for the interest of this Syndicate, and when issued, to control and dispose of, in his discretion any and all securities thus issued.

5. This Syndicate agreement shall continue in force and operation until the first day of February, 1902, unless sooner terminated by the Syndicate Manager, in his discretion, and upon notice to the Syndicate Subscribers.

6. The Syndicate Subscribers will, from time to time, and at any time, on call of the Syndicate Manager, and to the amount of such call or calls, make cash payments on account of their respective subscriptions hereunder, upon ten days' written notice by mail from the Syndicate Manager.

All payments hereunder from time to time by the Syndicate Subscribers shall be made to the Trust Company, designated in such call, for the account of the Syndicate Manager.

Each Subscriber shall, at the time of making each of the payments called hereunder, receive a certificate issued by the said Trust Company, certifying to the amount of such payment, and the interest of such Subscriber in said Syndicate, subject to the terms and conditions of this

agreement. Such certificates shall be in assignable form, and be transferable only on the books of said Trust Company by assignment and surrender of such certificate, and, upon such assignment and surrender, a new certificate shall be issued in the name of the Transferee.

7. The Syndicate Manager shall have the sole direction, management, and the entire conduct of the Syndicate, and the enumeration of particular or specific powers in this agreement shall not be considered as in any way limiting or abridging the general power or discretion intended to be conferred upon and reserved to the Syndicate Manager in order to authorize him to do any and all things proper, necessary or expedient in his discretion to carry out the purposes of this agreement; neither shall he be liable under any of the provisions of this agreement, or in or for any matter connected therewith, except for want of good faith and the failure to exercise reasonable diligence.

8. The Syndicate Manager shall be entitled to a commission of two per centum on the amount of the subscriptions hereto, without any obligation to share the same with any Subscriber, or to account therefor to the Syndicate or to any Subscriber, which shall be the full compensation of the Syndicate Manager in managing the Syndicate and supervising the construction of the new lines.

All other expenses of the Syndicate Manager, including counsel fees, brokers' commissions, and all other disbursements and expenses made by him in connection with the carrying out of the purposes of this agreement shall be a charge to the Syndicate, and all profits and losses of the Syndicate shall be divided and borne **pro rata.** The Syndicate Manager is to be a Subscriber to the Syndicate, and, to the extent of any such subscription or reservation by it, he is to participate in the profits and losses to the same extent as other Subscribers.

Should the Syndicate Manager, in the carrying out of this agreement, sell and dispose of said railroad properties, or stocks and securities received therefor, the net proceeds of such sale shall be distributed **pro rata** to the Subscribers from time to time in the discretion of the Syndicate Manager. Should said properties not be sold, but be capitalized by the formation of a new company or companies, of which companies the Syndicate Manager acquires the securities issued, or should said properties or any part thereof be disposed of for stocks and securities which are not sold by the Syndicate Manager, then, after payment of all expenses and commissions accruing under this agreement to said Syndicate Manager, and upon the termination of the Syndicate, such securities so acquired shall be distributed **pro rata** to the subscribers hereto or their assigns, as provided herein.

9. Each Syndicate Subscriber hereby ratifies, assents to and agrees to be bound by any action of the Syndicate Manager taken under this agreement, and agrees to perform all of his undertakings hereunder, from time to time, on call of the Syndicate Manager, to the full extent of the amount set opposite his name or allotted to him, but he shall be liable hereunder solely to the Syndicate Manager or his assigns, and only to the extent of his individual participation in the Syndicate.

Each and every party hereto will, upon reasonable request, execute and deliver all further writings which may be necessary or proper to carry this agreement into effect.

The failure of any Syndicate Subscriber to perform any of his undertakings hereunder shall not release or affect any other Syndicate Subscriber. The Syndicate Manager may, in his discretion, by written consent, release any Syndicate Subscriber. In case any Syndicate Subscriber shall fail to perform any of his undertakings hereunder or be released by the Syndicate Manager, other Subscribers may be received by the Syndicate Manager and take the share of the Subscriber so failing to perform his undertakings or so released. Upon failure of any Syndicate Subscriber to perform any of his undertakings hereunder, the Syndicate Manager shall have the right, at his option, to exclude such Syndicate Subscriber from further interest and participation in the Syndicate, and to hold him liable for all damages caused by his failure.

Nothing contained in this agreement or otherwise, shall constitute the Syndicate Subscribers partners with the Syndicate Manager or with one another, or render them liable to contribute more than their ratable amount as aforesaid, or entitle them to any participation in the results or profits of said Syndicate other than as specified in this agreement.

10. This agreement shall bind and benefit ratably, according to the amount of the several subscriptions, not only the parties hereto, but their respective successors, survivors, assigns and personal representatives. An original hereof is to be signed by the Syndicate Manager and deposited with the Trust Company so to be designated by him, and counterparts may be signed by the Syndicate Subscribers and retained by the Syndicate Manager, and all shall be taken and deemed one original instrument.

11. All notices issued by the Syndicate Manager hereunder shall be mailed to the addresses of Subscribers as given below opposite their respective names.

The holding of certificates issued by said Trust Company, shall constitute such holders parties to this agreement, as fully to all intents and purposes as if signing the same.

In Witness Whereof, The Syndicate Manager, party of the first part, has signed an original hereof, and the Syndicate Subscribers, parties of the second part, have subscribed said original, or counterparts hereof, as of the day and year first above written.

NAME	ADDRESS	AMOUNT

Accounting Principles and Procedure.

In the case of a construction syndicate, or in the case of any syndicate with large capital and numerous participants, it is best to open a distinct and complete set of syndicate books.

In the Journal, as a basis, it is often desirable to make a complete copy of the syndicate agreement, showing the subscribers and the respective amounts subscribed by each. This preserves and makes available in the books themselves, the agreement upon which the accounting must rest. The accounts may be opened by an entry debiting the respective syndicate subscribers and crediting the syndicate Capital Account. As the money is paid in upon calls, Cash is debited and the respective subscribers are credited. The entries, in such a case, would be:

Syndicate Agreement, copied in full, as memorandum.

SUNDRY SUBSCRIBERS............................
To CAPITAL ACCOUNT..........................
For syndicate subscriptions (account opened for each subscriber in general or subsidiary ledger).

CASH...
To SUNDRY SUBSCRIBERS....................
For payment of call number....of....per cent.

If, as is sometimes the case, all the money is not called in, there will be an overstatement of capital on one side, and an authorized but uncalled

amount of subscriptions on the other. For this and other reasons it is preferable in many cases to charge Subscriptions Called as the calls are made, and credit Capital Account, the latter showing at all times the amount of subscriptions called for payment.

Cash is charged and Subscriptions Called is credited as payments are received upon the call. The detailed account with the subscriber may be operated in a subsidiary ledger, card or otherwise, so that the unpaid calls in such record would prove against the balance of the Subscriptions Called Account. The entries, in such alternative procedure, would be:

SUBSCRIPTIONS CALLED............................
    To CAPITAL ACCOUNT..........................

CASH..
    To SUBSCRIPTIONS CALLED...................

It is immaterial which method is used although the latter keeps the financial records clear of accounts that may never actually enter into the accounting record proper.

In order to keep a proper record of transfers from the data which is supplied by the bank or trust company, it is necessary to operate a book similar to a stock ledger, giving the name of each subscriber, address, amount of subscription, payments thereon, etc. Inasmuch as it is often necessary to send out notices, prepare lists of subscribers, etc., a card ledger, the units of which can be sorted and handled conveniently, is preferable to a bound book or loose-leaf ledger. This is especially true where the subscribers are numerous.

The object of the syndicate is usually effected by the acquisition of securities, or the construction of property, paid for by the cash which has been received. The treatment of such assets is no different from that accorded in other accounts.

Thus, the property acquired would be charged at cost, and the entries, in principle, would be:

PROPERTY...
    To CASH......................................
        For amounts paid.
    To CREDITORS.................................
        For amounts owed.

The assets are ordinarily turned over to the corporation for which the property is being acquired or constructed, and paid for in corporate securities. The entry, in effect, would be:

SECURITIES..
    To PROPERTY..
    " BONUS or SURPLUS.................................
For sale of properties, for which securities were received, as follows:

*   *   *   *   *   *   *

If the securities received from the corporation exceed the value of the assets as they appear upon the syndicate's books, and it is desired to carry such securities at their par value on the books of the syndicate, it is necessary to set up an account to receive the excess credit, to be called a Bonus Account, or some other name, as the case may require. Discounts upon the sales of the securities eventually find their way as a charge or offset against this account.

The liabilities being paid, and the assets reduced to cash, or to some other desired basis for distribution, the nominal elements are collected in a Profit & Loss Account. The balance of this account is transferred to a Subscribers' Distribution Account, to which has been transferred, as a credit, the amount of the syndicate capital. As each subscriber presents his certificate for cancellation, he receives his **pro rata** share of the assets, and the Subscribers' Distribution Account is charged and the assets credited with the amount thereof. This is substantially the same procedure as obtains in the dissolution of a corporation.

The expenses, other than the direct cost of properties, is often transferred to Cost of Property before the sale of the properties, and are eliminated in that way. But if there are any nominal debit elements that remain on the books, they are a charge against Profit & Loss Account. Thus, the entries would be, after determination of the profit, in principle, as under:

PROFIT & LOSS. . . . .
CAPITAL ACCOUNT. . . . .
    To SUBSCRIBERS' DISTRIBUTION ACCOUNT. .
For transfer.

SUBSCRIBERS' DISTRIBUTION ACCOUNT. . . . .
    To ASSETS. . . . .
For *pro rata* distribution upon presentation of syndicate certificates.

There may be many contingencies, such as payment to subscribers in instalments, the distribution of securities, or the distribution of part securities and part cash, but the general principles that apply have been sufficiently illustrated.

Bond Syndicates.

As indicated by the definition, a syndicate is useful when it is desirable to pledge, for temporary purposes, large amounts of capital. This is true in the common form of bond syndicate, known as an **underwriting,** in which a banker bids upon an issue of bonds which he believes can be bought and resold to investors at a profit. In many cases the banker would not care to undertake, unaided, to buy and market the issue. To meet the situation, a few of the banker's clients who may be interested in such a venture, are approached with a syndicate agreement, by the terms of which the syndicate agrees to take the bonds from the banker at cost, or such other price as may be agreed upon, each subscriber binding himself to pay in the amount of his subscription and to take his **pro rata** share of bonds. The banker, however, is constituted syndicate manager, with power to sell the securities, and usually receives a commission, regardless of results. Under the power to sell, the syndicate manager will offer the bonds for public subscription at a price above the cost to the syndicate. It may be that the manager will call in only a part of the subscriptions, loaning the balance to the syndicate on the security of the bonds held, or negotiate a loan for the syndicate on such security; or he may, in fact, advance all the money, and make no call whatever, although this is unusual.

If the bonds are sold, the manager deducts all expenses and his commission, pays all loans and distributes the proceeds. The subscribers may thus secure a substantial profit with the advance of but a small amount of capital.

On the other hand, in case the bonds cannot be sold at a profit, the syndicate may be extended in the hope of a more favorable market. If this is not done, or the market does not materialize, the remaining amount due upon subscriptions, or such amount as is necessary, is called in, all expenses and loans are paid, and the bonds are distributed **pro rata.**

The private bankers control the investment market to such an extent, that those engaged in financing enterprises recognize, in the majority of cases, the futility of attempting to float large issues of securities without the aid of the banker, and the method indicated is the one commonly employed.

In times of prosperity, when securities sell readily, syndicates are profitable, and participation in those formed by successful bankers is much sought. In times of market stagnation, the syndicate members become loaded with securities through the failure of the public to buy.

So far as the accounting procedure is concerned, if there are but few participations, the banker may open an account with each, crediting amounts paid in, and charging advances and the cost of securities bought for each. The securities are apportioned, and the proceeds applicable to each account are credited. When all charges, including expenses, are made, and all credits have been entered, the results will show an amount due from or to the subscriber. The par of the securities acquired and sold for each account may be shown as a memorandum.

Thus, A, B, and C, as subscribers, and D, as syndicate manager, organized a syndicate of $300,000 for the purpose of buying $300,000 of bonds, to which each of the subscribers agreed to contribute $100,000, subject to the call of the manager. A call of 25 per cent. was made upon the subscribers, and in response, A, B, and C each paid to D, $25,000. The bonds were bought for $270,000, the manager, as a banker, loaning to the syndicate the amount necessary, in conjunction with the cash already paid in, to pay for the bonds. The bonds, and the syndicate agreements to pay in the remaining calls, were held as security to the loan. The bonds were sold at a profit sufficient to pay all expenses and to return the subscriptions paid in, with a 20 per cent. profit, or $30,000 net to each subscriber.

The banker, who was the syndicate manager, could open an account in his books with each subscriber, crediting the amount of subscription paid in. To each account could be charged the proper proportion of the cost of the bonds and expenses. The par of the bonds held as security to the advance could be shown in the explanation column of the account. As sales were made, the **pro rata** amounts could be credited to the respec-

tive accounts, the final credit disclosing the amount to be paid to the subscriber.

This procedure is useful in syndicates with few subscribers, and involves proportioning all transactions as they occur. In the majority of cases it would be better to open a distinct set of books to cover the syndicate transactions.